ASPECT4

– udsigt til indsigt

Release 5
Logistics

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1 Introduction to Release 5 of ASPECT4 Logistics

ASPECT4 Release 5 continues where Release 4 left off - not only in terms of the sequential number, but also its contents. The predominant themes of ASPECT4 Release 4 were mobility and the simplicity that characterizes mobile apps on smartphones and tablets. Release 4 was also the ASPECT4 release with the fastest penetration of the market ever. The dialogue with our ASPECT4 customers has taught us that customers and users highly appreciate simplicity and to be able to bring their consumer habits with them into their professional activities, so to speak.

One of these consumer habits is the option of using their preferred search engine for global information. Google searches have even given their name to a new verb when we "google" in order to find what we are looking for. We are inspired by this in an ASPECT4 context, and we have noted that as consumers, we prefer search engines that deliver simplicity, speed and accuracy. With ASPECT4 Insight Search, ASPECT4 Release 5 offers the same experience and efficiency – and some additional features.

Generally, Release 5 is introduced under the theme of ASPECT4 Insight, and in addition to its strong and efficient search, ASPECT4 Insight also offers other types of insight and overview. One of the big novelties is ASPECT4 Insight Infoboards – or in brief: Infoboards. Infoboards are a new concept for providing a fast and relevant overview presenting essential and relevant information about ASPECT4 business objects – in relation to the use context. These overviews, i.e. infoboards, are a further development of the Stepping Stone concept, which was introduced in ASPECT4 Release 3.

In addition to ASPECT4 Insight, a number of major and minor extensions and developments of ASPECT4 have been made, e.g. for the ASPECT4 Client, the EG CrossPad mobility platform and the ASPECT4 Query-Manager reporting tool. Here, you find a number of novelties in direct continuation of the theme – all with the purpose of giving users better overview and insight as the basis for faster and better business decisions and process support in the daily work.

In ASPECT4 Logistics, we have been working with the above-mentioned general themes, and in addition we have been working with specific improvements within the logistics area.

As part of the preparatory work for Release 5 we held a meeting in March 2014 with a number of our customers to enter a dialogue on what is important to them in the future development of ASPECT4 Logistics. This gave us a number of headlines which we have continued to work with during the subsequent release work:

- One system
- More apps
- Master data
- Calculated fields on tables
- Agility Cross Docking
- Forecasts and arrangement
- Sum fields on orders
- Technical issues
- Cross-disciplinary activities.

As usual, we have made a multitude of improvements and extensions within ASPECT4 Logistics. We also describe the minor improvements of ASPECT4 Logistics introduced since the last release – improvements that often remained "a secret" to many users but can help ease the daily work.

This document contains a description of the new options provided by the new release. Thus, improvements – of which some are mentioned below – have been made within the following main areas:

More apps
Apps for management information have been developed:

- An app showing order intake, sales and order backlog
- An app showing the stock value.

Master data
We have increased the number of "free fields" in existing tables so that individual solutions can be established easily for our customers.

Calculated fields
Calculated fields and sum data are now included.

We have extended existing tables with extra data, e.g. order headers and order lines.

Furthermore, we have established new sum tables where appropriate for the use.

Sales
The biggest reorganisation of the release has been made within budgeting. The use is now more in accordance with the budgeting methods used by today's companies. It is possible to have many budgets that are consolidated before they form the basis of the further arrangement. Export from and import to spreadsheets have become part of the solution as many companies use these in their daily work.

We can now print an invoice copy that is based on the data available at the time of printing, so now you no longer need to go through the document archive in order to get a copy.

It has become possible to re-invoice a credit note directly.

Warehouse
Differences in the stock values could be generated if discrepancies exist in the FIFO values of a warehouse where the inventory transactions are not necessarily updated at the exact time when they are carried out. Now, a function has been added that can settle these zero values.

We have developed functionality for calculating the minimum stock on the basis of budget figures and forecasts, which for some customers are more correct than the history.

Purchasing
Functionality for keeping purchase prices when splitting a purchase order line has been added.

Furthermore, various improvements related to receipt of supplier invoices have been included in this release.

Production
Production feedback has been changed so that the most frequent workflows are reflected in the basic set-up.

One system
Now you can also use the F2 key for displaying the data history of a field.

The sales list handling has been modified so that submission of EU VAT, data relating to triangular trade and service amounts are now reported together.

Intercompany
We have changed the re-allocation of purchase orders so that it now matches the functionality most often seen in the companies that use it.

Cross-disciplinary improvements
In the course of time, many error lists have been lost in output queues. However, in many programs it now becomes possible to retrieve these using the Event and Exception Manager, i.e. receive the error list by e-mail or text message instead.

Release 4 included a solution in which address fields could be split into many sub-elements, thus making integrations with e.g. carriers much easier. We have continued this work, and the result is that more addresses can now be split, whether the address is a delivery address or an address entered on an order or a freight docket.

Now it is no longer necessary to create a virtual output for each user if they are in fact going to see the same output. We have introduced the option of creating virtual output on user groups. This means that users can now see which virtual output is available, regardless of whether it is personal or attached to their roles and the function groups they belong to.

It is now possible to manage access to functions in applications through authorisation. Instead of creating a number of copy applications that had different options, one application is now enough when access is controlled through authorisation.

A number of new field control idents have been developed for use in different applications.

Activity Streams
We have developed a couple of Activity Streams which are included in the release.

Infoboards
We have developed a couple of infoboards which are included in the release. These infoboards consist of a number of elements which can be put together in different ways in order to cover individual needs.

ASPECT4 Insight Search

In this area, we have chosen to include product search, customer search and search for the customer's order number in the release.

It will be possible to set up the specific searches needed by the individual company, but the ones mentioned above are relevant for most companies.

2 More apps

In connection with Release 4 in the spring of 2013, apps were introduced in ASPECT4. An app development platform was launched under the name of CrossPad through which central parts of ASPECT4 can become available on mobile devices.

ASPECT4 Logistics had developed the following apps for Release 4 under the theme of mobility:

- For warehouse:
  - Picking from warehouse for dispatching
  - Planned inventory transactions
  - Unplanned transfers
  - Stocktakes
- For external service:
  - Job overview for off-site service engineer
  - Job overview and feedback
  - Overall solution
- For internal service:
  - Job overview
  - Job overview and feedback
  - Overall solution
- For production:
  - Job overview
- For purchasing:
  - Order registration.

Of course, mobility does not stop with a single release; therefore we have developed further apps for this release.

This time, our focus has been on management apps. Information that can easily provide an overview of the company's current situation in different areas.

These apps are intended to carry information that will only be viewed at an overall level. If you need to continue working with the retrieved data, corresponding applications are available that hold this data.

2.1 Order intake, sales and order backlog per day, per company/customer

The purpose of this app is to create a more managerial anchoring of apps from ASPECT4 Logistics, thus spreading the use and the development of more apps – both standard and customer-specific ones.

Per day – or any other accrual – the app must display:

• Sales
• Order backlog
• Order intake.

This app enables users to easily get an overview of the key figures that they obtain every day anyway.

The following definitions apply:

• An **order intake** is a change in the order backlog. This means that new order lines as well as changes in order lines (including deletions) are included in the order intake.

• The **factual date** is used – i.e. the date on which something has been entered/changed in ASPECT4 Logistics. This means that if you are performing a transaction on another date than the current date, it will not always be possible to reconcile between these data and the financial system.

The app is intended for use on tablets, but it may also be run on a smartphone.

2.1.1 Properties ⚙

The following may be set up:

Customer Type: External/Internal/All
Display Level: Day/Week/Month/quarter/year
Number of Periods (to display): between 1 and 20
First displayed graph: Sales, Order intake, Order backlog

The settings are saved and will be used next time the user opens the application.

2.1.2   Sales, Order intake and Order backlog

When you enter the app, figures are displayed for the setup specified in Properties.
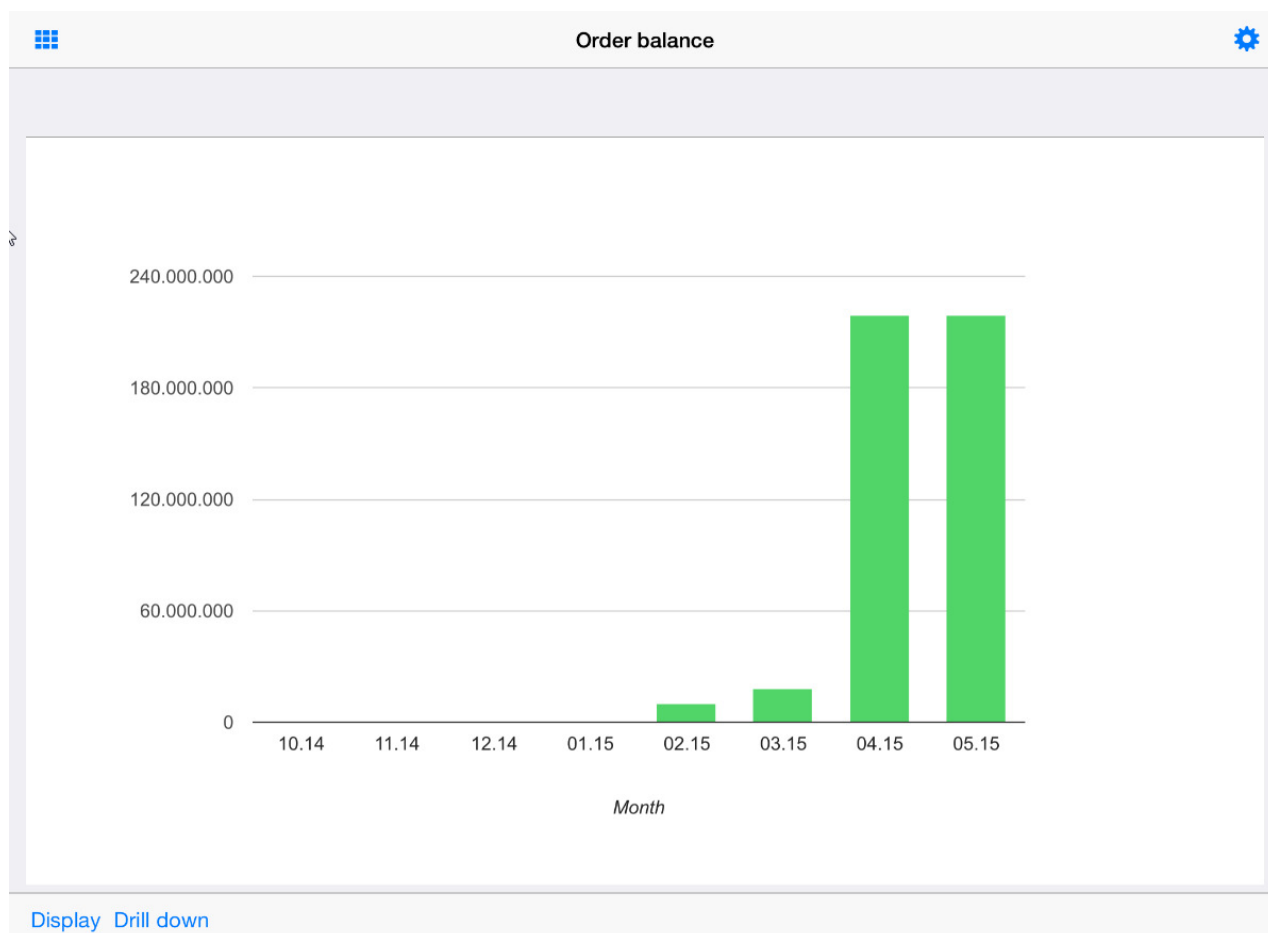
If you want to change what is displayed, press "Display":
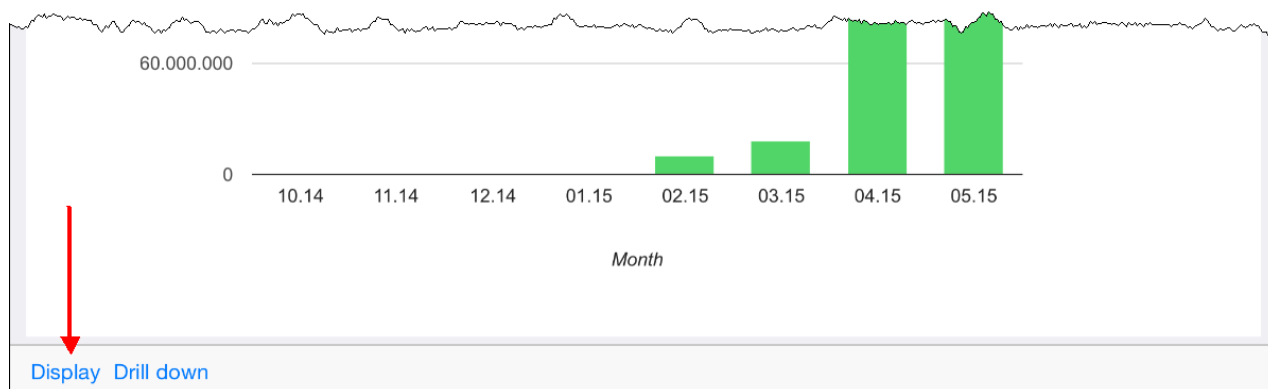
You can then select another option for display:

If you want to use grouping, press "Drill down":
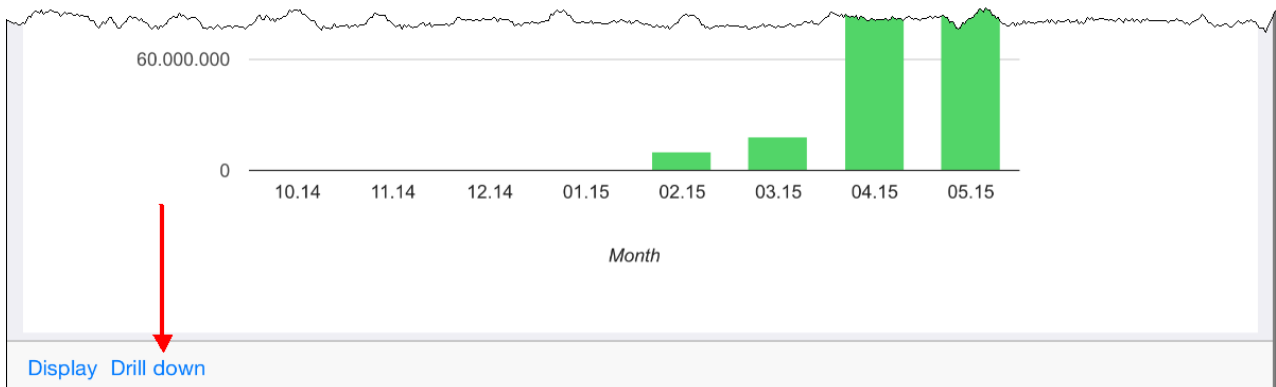
This displays the available groupings.

When you select a grouping, you see a list of available options.

When you have selected the desired option from the list, the associated overview is displayed – and it is indicated which grouping is displayed.

Display Kurt Jørgen Hansen Drill down

If you want to display another grouping, press "Drill down" again to display and select one of the remaining groupings.

If you want to go back one level instead, select the displayed grouping and press "Drill up":

Grouping	Drill up
Q Søg	
Country	>
Salesperson	>
Customer group 0	>

Display Drill down
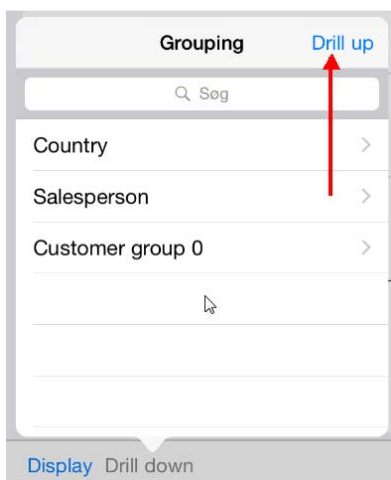
The figures are summed up by the type of period specified in Properties (Display level) and the specified number of periods are displayed.

2.2 Stock values per warehouse – Company/warehouse/item option

The purpose of the app is to give the user an overview of stock development. This means that, if necessary, preventive measures can be taken as early as possible.

A development in stock values is often to be expected – no matter if it is expected to be increasing or decreasing. However, in case of unexpected development, reaction is required.

This app enables users to easily get an overview of the key figures that they obtain every day anyway.

The app is intended for use on tablets, but it may also be run on a smartphone.

When you enter the app, the displayed figures indicate the "closing stockholding values" for the period that was most recently selected. On first open, the displayed period will be "Day".

Stock values			
Week	27.05.15	24.05.15	Trend
TOTAL	55.045.010,48	0,00 →	>
Standard Items	42.422.034,05	0,00 →	>
Seasonal items	12.562.500,00	0,00 →	>
Customized items	57.122,83	0,00 →	>
Accessories	3.353,60	0,00 →	>

Day	Week	Month	Year

The difference is indicated as the deviation percentage between the displayed date and the date of the immediately preceding period. Closing date values are always used, i.e. if you compare weeks, the difference will be measured in relation to the closing date of the previous week – and the same principle applies to months and years.

The indicator shows if the stock value is increasing, decreasing or unchanged. The percentages specified in the application parameters are taken into account.

If you push ">" next to the total or a grouping, a chart is displayed showing the number of periods specified in the application parameters for the most recently selected type of period.

2.2.1 Setup

In Maintain application parameters (0128) for Application 9M35, you have to specify:

- Stock values per
  - Warehouse number (L)
  - Warehouse area (S)
  - Item group (0-9 or R)

- Trend indicator % – decreasing (a percentage that has to be exceeded before the indicator is considered to be decreasing).

- Trend indicator % – increasing (a percentage that has to be exceeded before the indicator is considered to be increasing).

- Number of periods (the number of periods to be displayed in the chart on the second level with a max. value of 20).

3 Master data

3.1 Master data – Free fields for items

A new solution has been introduced that makes it possible for you to document and describe items within the framework of the standard system.

The design of the solution makes it easy to add new information types to a product type. Time has shown that new markets, new trading relations, new quality demands and new legal requirements continue to increase the need for documentation in relation to an item.

Often you need more documentation for an item than what is available through our selection of fields.

This applies to the following types of information among others:

- Grouping – for reporting purposes
- Properties
  - Figures: size, length, content, width, etc.
  - Parameters or Y/N codes: packaging, type of material, certificate requirement etc.
  - Text: any text that for some reason should be placed in a structured context
- Controlling parameters – usually connected to individual business logic.

The following table has been extended:

- Basic item (VARBTBL)

Field name	Description	Format
VARBGRPA ... VARBGRPJ	Item group A ... Item group J	5 characters
VARBPAR0 ... VARBPAR9	Parameter 0 ... Parameter 9	**10 characters**
VARBNUM0 ... VARBNUM9	Item numerical code 0 .. Item numerical code 9	11 digits with 2 dec.
VARBRNR0 ... VARBRNR9	Item reference number 0 ... Item reference number 9	**16 characters**
VARBALFA0 ... VARBALFA9	Item alfa 0 ... Item alfa 9	1 character

Quantity fields are not included, since this type of field is handled by Alternative units (VAOF) for items. In case of static "quantities", units are created with "From date = 0".

Text fields are not included either, since this type of field is handled by Language-controlled texts (SPOT).

Use in a customer environment
If you want to use one or more of the free fields, do the following:

- Field help (9193) is created in the customer's language (7*).

- Label and column name (9061) are created in the customer's language (7*) for Ref.Ident (= Field name).

- If validation in relation to system parameters (90XX) is required, create a validation using the parameter name preceded by X.

- For "Work with" and "Display" applications in which you want to display the field, create/edit Field overrides (9160) for the relevant Field definitions. If you want to use an Alfa 1 field as a Y/N field, change the type to 82.

- For a batch application in which you want to use the field, change the Field definition (9170).

- If replication of item master data between companies is used, a setup has to be added in the Intercompany setup (9190).

Quantity fields that are maintained as alternative units can be retrieved in applications for a specific unit (ENHED = 'BOX') using the field control ident as shown in the following example:

```
&DATO := 00000000
&ENHED := 'ÆSKE '
&KEY := UNTRIM(*LDAVARBNR,16) + UNTRIM(&ENHED,5) + CHAR(&DATO,8)
 *DATA := GET('VAOFREG','VAOFOMRFAK',&KEY)
*DEC := 1
```

Text fields for files saved as Language-controlled texts (SPOTTBL) are set up by adding a new field to the Field definition for the application used for maintenance. For example, VARB1TXT with Text type U, Language code, Field type 60 and Buffer position 0. If a text length of 60 is required, create the field with length 120. For language code, the same language code is used as for *BETEGN. The naming convention

for an individual field has to be maintained (a numerical value in position 5) to ensure that no future stand-ard fields have the same name.

3.2   Basic items – Promotion of item-related excise duties

In cooperation with Cocio Chokolademælk, the functionality for handling excise duties has been changed. When excise duties are attached to an item number, the excise duty can now immediately be promoted to being current, if relevant. This requires that the item number has no holding.

When copying item numbers in Basic items (9102), you can choose to include the attached excise duties for the new item number. Simultaneously, these excise duties can be promoted to current, if relevant.

Alternatively, copying of excise duties can be done using Common item maintenance (9703). In this case, the excise duties cannot be promoted to current.

The following change has been implemented in the system parameter "Excise duty – Optimisation parame-ters" (AFGIFT):

You now have the following options:

0. Newly attached excise duties are immediately promoted to current if no stockholding exists. When cop-ying item numbers, excise duties are copied to the new item number and immediately promoted to cur-rent.

1. Newly attached excise duties are not promoted to current. When copying item numbers, excise duties are copied to the new item number, but not promoted to current.

2. Newly attached excise duties are not promoted to current. When copying item numbers, excise duties are NOT copied to the new item number.

3.3   Item priorities in item search

In cooperation with Kyocera Unimerco, we have developed functionality for adding a sorting field in item search.

The purpose of priorities or search sequence in item search is to support the sales representatives in selling specific items, e.g. in-house products instead of vendor products. Another example could be to promote sales of items in stock. The priority of or search sequence in item search can be overruled by a field control ident. It an item search can have several results, this setup makes it possible to assist the employees in se-lecting the items that they should primarily focus on selling.

4 Calculated data and sum data

4.1 Production and service, calculated values in the database

The purpose of this task is to provide direct access to the basis of the analyses of service and production order backlog as well as performance analyses, in a way that makes it possible to create reports on the fly using Queries or direct transfer to any existing BI solutions.

When the calculated values are directly accessible, it is also easy to create apps, Client inquiry applications, QueryManager output and/or prints for virtual output.

The following tables have been extended:

1. Production orders – headers (PROHTBL and PROHTBLA) (Totals for work in progress and Other production variances)
2. Production orders – operations (PROOTBL and PROOTBLA)
3. Production orders – flow items (PROFTBL and PROFTBLA)
4. Production orders – capacities (PROKTBL and PROKTBLA)
5. Production orders – stock items (PROLTBL and PROLTBLA).

with:

- Actual quantities/hours
  - Split into fixed, variable, setup, wastage …
- Adjusted quantities/hours (historical costing figures)
  - Split into fixed, variable, setup, wastage …
- Target quantities/hours (performance indicators)
  - Split into fixed, variable, setup, wastage …
- Planned amounts
  - Prices/rates per date (same logic as 8261) * planned quantities/rates
- Actual quantities made up as planned prices and rates
- Actual amounts
  - Split into fixed, variable, setup, wastage … Summation of POPs as 8261/8472
- Actual start (earliest process feedback)
- Actual end (latest process feedback)
- 5 free fields for amounts
- 5 free fields for quantities.

A number of prints already exist, e.g.:

- Production variances (8472)
- Historical costing (8261)
- Usage variances – summed-up (8486)
- Usage variances (8466)
- Production order backlog – period accrued (8432)
- Print work-in-progress schedule (8462) – Note: per date.
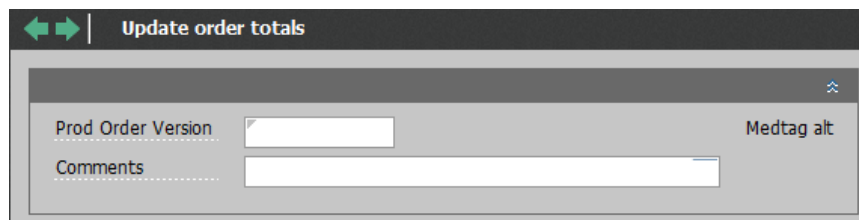
The database extension enables easy extraction of all information for the above-mentioned prints by simple calculation without any need for lookup in production feedback or prices and rates.

Updates are performed:

- When calling the new batch application, Update sums for production & service orders (8275), which performs calculations for all types of production and service orders with a status of < 80 based on selection from the system parameter "Version of production and service order enquiry" (POPROF). Values are updated on the basis of the data present at run time.

  The reasons for including version are:

  - To enable running the application with different intervals for different order types.
  - To filter out orders with totals that are not interesting. For example, it may not be interesting to update forecast orders as often as other order types.

- When calculating production variances (8272). From this point in time none of the values can be changed, which means that they can be reconciled with finance.
- When running a new application called with order type, order number (and transfer date = 0). This application can then be used as a shortcut-application, e.g. from Production feedback (8160), where current totals can be relevant in connection with control of production variances before the completion of a production order.
- When calling a module, which can be done from Automatic task in Workflow or Onward processing. This makes it possible to set up immediate updates whenever relevant.

4.1.1   Performance considerations

Update sums for production & service orders (8275) is set up for automatic execution in order to perform the updates at the right time in relation to the work processes for keeping up analysis and holding of production performance.

4.1.2   Implementation

By default, these fields are not shown in the applications. You have to consider whether to make some of these new fields visible in different setups. In connection with the upgrade to Release 5, it has to be determined in which applications it will be relevant to have access to the calculated values.

4.1.3   Conversion

A conversion program has been developed which will be called in connection with release upgrades. This ensures that all totals for all Production orders (50) and Service orders (60) with a status of 80 in Production data (PROxTBL) are updated with the values described above.

4.2   Sales, calculated values in the database

The purpose of the result of this task is to provide direct access to the basis of the analyses of sales orders in a way that makes it possible to create reports on the fly using Queries or direct transfer to any existing BI solutions.

When the calculated values are directly accessible, it is also easy to create apps, Client inquiry applications, QueryManager output and/or prints for virtual output.

The following tables have been extended:

- Order header (Sales)
- Order lines (Sales).

An update is performed when changes happen in the Order header (Sales) (ORDHTBLS) or Order lines (Sales) (ORDLTBLS) as well as in Order excise duty lines (ORDATBL) with Line number 0.

Order totals can also change as the result of other changes that are not on the order itself. For example, this could be the freight group for the item, the exchange rate or the standard cost price.

This means that a need for recalculation of a specific order can arise.

This need may e.g. arise in a situation when someone notices that the calculated freight for an order is incorrect. The reason why this happened is that the item uses the wrong freight group. This is corrected, and afterwards you want to perform a check.

4.2.1   Performance considerations

Calculate order totals (6262) should be run in connection with updates of the following values:

- Cost prices
- Basic sales prices
- Freight rates/tariffs
- Bonus rates
- Freight rates
- Exchange rates
- Excise duty rates

A field has been added on the system parameter "Order types, descriptions, etc." (ORDRETYP), which specifies if order totals should be calculated on the individual order types:

4.2.2   Conversion
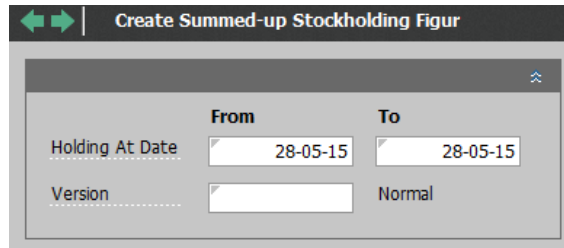
A conversion program has been developed which will be called in connection with release upgrades. This ensures that all totals for all Sales orders – no matter their status or order type – are updated with the values described above.

If you want to include a new order group in the totals calculation at a later stage, the application mentioned in section 4.2.1 Performance considerations, Calculate order totals (6262), can be run for an individual order group. This results in a calculation of open orders. Please note that no calculation will be performed on closed orders.

4.3   Stockholding and stock movements per date, totals database

The purpose of establishing a table with totals for stockholding figures and stock values per date is to make the basis of the data for different analyses more easily accessible. These totals form the basic data for an app, which is described in section 2.1 Stock values per warehouse – Company/warehouse/item option.

A new application has been developed, Create summed-up stockholding figures (9255), which updates this new totals table for stock:

Records are created per date in the date range specified in the request. However, this only happens if one of the quantity fields or one of the amount fields is different from zero. This ensures that "dead" items do not remain in the table.

The calculation of the value of stockholding is determined by the cost price method of the item.

Summed-up stockholding figures per date (LBSUTBL) contains quantities and values for:

• Closing holdings
• Receipts from purchase
• Receipts from production
• Receipts from other sources
• Issues to sales
• Issues to production
• Issues to internal usage
• Issues to other uses
• Adjusted quantities
• Price adjustments.

The material profile version to be used for selection in connection with calculations is specified.

Please note that in cases when registrations are performed later on, the new table may not document the correct figures for stock holdings for any given date.

If you want to clean up the contents of the table, this has to be done using SQL.

It is possible to delete items or warehouse numbers even if totals exist, but we recommend not to delete discontinued items and warehouse numbers physically, but instead put them in status 90.

4.3.1   Performance considerations

Update summed-up stockholding figures (9255) should be set up for automatic execution. How often it has to be run depends on the level of detail you want to be able to use in your analyses, i.e. for some it could be several times a day and for others it may be once a week.

4.3.2 Conversion

The new application has to be run with a date range that reflects the historical data basis that matches your needs.

4.4 Order backlog, totals database

The purpose of establishing a table with totals for sales order data is to form a data basis for an app – described under 2.1 Order intake, sales and order backlog per day, per company/customer.
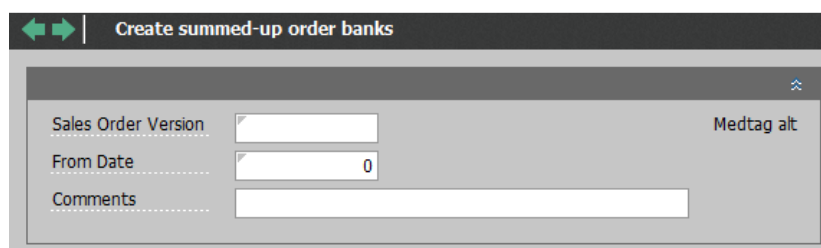
To keep track of the ongoing changes of an order, logging of all involved order information is performed.

A log table has been created on the basis of changes to the order header. When a change happens in status or the totals that constitute the net revenue on the order header, an entry is made in the log table.

Changed order headers (LOORTBL) contain:

- Customer number
- Paying customer number
- Order identification
- Before and after values for
  - Status code
  - Net revenue with charges
  - Net revenue without charges
  - Free fields.

A new application has been developed, Create summed-up order backlogs (6272), which updates a new totals table for the order backlog on the basis of the logged changes:

Records are created per customer or debtor for the dates with changes in the order backlog within the date range specified in the request.

Summed-up order backlogs per date (ORSUTBL) contain:

- As on date
- Customer or debtor number
- Groupings (selected)
- Whether a customer is internal or external
- Opening order backlog

- Receipts to order backlog
- Issues to sales
- Closing order backlog.

A system parameter, Order sums – Optimising parameters (ORSUDATA), has been created as an optimisation parameter for Create summed-up order backlogs (6272).

If you change these parameters, you have to run Create summed-up order backlogs (6272) again with a "From date" that matches the date from which you want the new setup to apply. The same applies if you want changed groupings for customers/debtors, which are used in this context, to be applied in historical totals.

4.4.1   Performance considerations

Update summed-up order backlogs (6272) should be set up for automatic execution. How often it should be run depends on the type of analyses that you want to be able to make.

4.4.2   Conversion/start-up

A start-up application is run to create all orders in the log table on the date when it is run. You have to specify which groups/companies they should be created for.

Please note that you cannot retrieve data from before the date when Release 5 was put in operation. All active orders at the time of conversion will be considered as originating on this specific date.

5   Sales

5.1   Reorganisation of the sales budget

The purpose of reorganising the sales budget is to initialize an optimisation of the arrangement in ASPECT4 Logistics.

A subordinate purpose is to be able to work with trends and patterns of seasonal variation in the sale (consumption) of the items. By being able to this, you can make more accurate plans for production and purchase.

This means that, in the long term, the arrangement itself can be based on the expected consumption of the items (including trends and patterns of seasonal variation), without you having to maintain minimum stocks or work with differentiated minimum stocks in accordance with the patterns of seasonal variation for an item.

By creating plans for production and sales, we will also later be able to work with different plans simultaneously. More specifically, it would be possible to have both a gross requirement and a net requirement in place at the same time (the gross requirement would be used for developing long-term capacity plans and purchase agreements, whereas the short-term daily arrangement would be based on the net requirement).

This process is started in Release 5 with an optimisation of the way that you work with sales budgets in ASPECT4 Logistics.

5.1.1   Changes in the way of working with budgets

From now on you can work with one budget string per budget. This lets you work with the budgets with different levels of detail for different markets, so these will reflect the actual sales patterns.

It is still possible to have several budget versions for each budget.

In addition, flexibility in the maintenance of the budgets has increased with the introduction of a possibility for export/import of budgets to/from spreadsheets.

5.1.2   Consolidation of budgets

You can now work with partial budgets and subsequently consolidate these budgets.

A specification of the consolidated budget is maintained in which it is specified which partial budgets the consolidated budget consists of. The partial budgets can have different budget strings. The level of detail in the consolidated budget will match the level of detail in the budgets that have contributed to the consolidated budget.

The consolidated budget is calculated on request, automatically using the supplied specification.

You can consolidate budgets on several levels. For example, you could consolidate a budget for Denmark, which would then be part of a budget for Europe, which on the final level would be part of the total budget.

To the extent that sales from campaigns are not included in the normal budget, you can create special campaign budgets, which can later be consolidated into the total budget.

For all budgets, you can maintain limitation parameters that describe the partial budget in question.

5.1.3   Transfer to sales forecast

If you work with partial budgets, it will be a total, consolidated budget that is transferred as the sales fore-cast.

5.1.4   Budget follow-up

When the budgets are split up, e.g. per market, the budget follow-up has to match the same pattern. This means that in addition to having its own budget parameter, a budget must also have its own limitation parameters (it could e.g. be country/district or something similar). The budget follow-up matches this.

The new budget tables have data fields for number, revenue and cost amount exactly as today. What is new in the budgets is that there are now corresponding figures for actual sales in number, revenue and cost amount.

The addition of data for actual values makes it a lot easier to create your own queries for targeted budget follow-up.

5.1.5   More details about the reorganisation of budgets

5.1.5.1   Work with budgets (6121)

From now on, budgets are not necessarily named by the year in which they start. The idea is that the budgets should have a name and a description just like any other named data.

The concept of **budget revision** has been retired. In the future, it will simply be called a budget. A monthly budget can have 24 running periods (you will typically have 12 periods at a time that are active and maintained).

The idea of having several budget periods (in this case 24 months) even though a year only has 12 months is to enable continuous maintenance of your budget. When the first 12 months have passed, you can copy the last 12 periods to a new anchor budget for the next year, etc.

The system parameter "Budget string" (BUDGSTR) has been retired, but is replaced by a new system parameter, "Budget parameters" (BUDGET), which is e.g. used for controlling which budget period the company uses, which item groups and customer groups are used, and which values are used as the basis for the budget.

Period

Budget Period
- ◯ Not Specified
- ◯ One Week
- ◯ Two Weeks
- ◯ One Half Month
- ◯ Four Weeks
- ⦿ One Month
- ◯ Thirteen Weeks
- ◯ One Quarter
- ◯ All Weeks of the Year (One Yr)
- ◯ One Calendar Year

Budget Figures

2 of:

Quantity	☑
Gross Price	☑
Gross Sales	☐

1 of:

Cost	☑
Cost Amount	☐
Contribution Ratio 1	☐
Contribution Ratio 2	☐

Groups

Item Group	4
Customer Group	7

The concept of **budget version** has been kept, but it can now be a 3-digit number. We have experienced a great interest in being able to save different budget versions to be able to go back and see the historical budgets.

The Budgets application (6121) has been converted to enable the above-mentioned changes.

First you have the budget details with a description of the different parameters for the individual budget:

Budgets > Edit

| Budget Name | 2015 DK | Budget Version | 1 |

Identification

Description (danish)	Annual budget 2015 DK.	
Number Periods	18	>= 1
Year for First Budget	2015	>= 2.000
First Budget Period in budget	1	>= 1
First Active Period in Budget	3	
No of Active periods in Budget	12	
Consolidated Budget	☐	

Budget String

| Item Group | 0 | Item Number | 2 | Customer Group | 0 | Customer Number | 3 | Country | 1 | District | 0 | Salesperson | 0 | Currency | 0 |

Delimitation

From Item Number	A	To Item Number	9999999999999999
From Customer Number	00	To Customer Number	01
From Country	DK	To Country Number	DK

Totals

Budgetted Gross Sales	51.250.251.003
Budgetted Cost of Sales	67.500.105.075
Actual Gross Sales	10.420
Actual Cost of Sales	350
Number of Lines	12

Afterwards, you can move on to the individual budget headers (Budgets 2nd level):

Budgets > Budgets 2nd Level

| Budget Name | 2015 DK | Budget Version | 1 | Annual Budget 2015 EN |
| Country | | Item Number | | Customer Number | |

	Ctry	Item Number	Customer No	Disc%	Comm	Bonus	Freight	Quantity	Sales Price	Turnover	Cost	Cost Amount	CR1	CR2	Quantity March 2015	Salesprice March 2015	Turnover March 2015	Quantity April 2015	Salesprice April 2015	Turnover April 2015	Quantity May 2015	Salesprice May 2015
1	DK	AA001254	00001	0,00	0,00	0,00	0,00	899.999.999	56,94	51.249.999.950	75,00	67.499.999.925	-31,71	-31,71	799.999.999	62,50	49.999.999.950	100.000.000	12,50	1.250.000.000	0	0,00
2	DK	AA001255	00002	0,00	0,00	0,00	0,00	0	0,00	0	0,00	0	0,00	0,00	0	0,00	0	0	0,00	0	0	0,00
3	DK	AA001255	00007	0,00	0,00	0,00	0,00	0	0,00	0	0,00	0	0,00	0,00	0	0,00	0	0	0,00	0	0	0,00
4	DK	AA001255	00008	0,00	0,00	0,00	0,00	0	0,00	0	0,00	0	0,00	0,00	0	0,00	0	0	0,00	0	0	0,00
5	DK	AA001255	00012	0,00	0,00	0,00	0,00	0	0,00	0	0,00	0	0,00	0,00	0	0,00	0	0	0,00	0	0	0,00
6	DK	AA001255	00013	0,00	0,00	0,00	0,00	0	0,00	0	0,00	0	0,00	0,00	0	0,00	0	0	0,00	0	0	0,00
7	DK	BØ33375	00001	5,00	2,00	1,00	3,00	7.054	35,59	251.053	14,91	105.150	55,91	53,02	885	11,30	10.000	1.271	0,35	448	488	21,61

When you edit a budget header, a new maintenance application, which provides a better overview, is displayed:

Budgets > Budgets 2nd Level > Edit

Budget

	March 2015	April 2015	May 2015	June 2015	July 2015	August 2015	September 2015	October 2015
Quantity	885	1.271	488	0	0	0	0	0
Sales Price	11,30	0,35	21,61	0,00	0,00	0,00	0,00	0,00
Turnover	10.000	448	10.556	0	0	0	0	0
Cost Price	0,00	17,05	17,05	0,00	0,00	0,00	0,00	0,00
Cost Amount	0	21.660	8.325	0	0	0	0	0
Contribution Ratio 1	100,00	-4.993,35	16,98	0,00	0,00	0,00	0,00	0,00
Contribution Ratio 2	100,00	-5.327,62	11,54	0,00	0,00	0,00	0,00	0,00

Actual

	January 2015	February 2015	March 2015	April 2015	May 2015
Quantity	987	0	0	977	0
Sales Price	10,00	0,00	0,00	0,56	0,00
Turnover	9.870	0	0	550	0
Cost Price	0,00	0,00	0,00	0,36	0,00
Cost Amount	0	0	0	350	0
Contribution Ratio 1	100,00	0,00	0,00	33,01	0,00
Contribution Ratio 2	100,00	0,00	0,00	28,62	0,00

Totals

Discount 5,00 Commission 2,00 Bonus 1,00 Freight 3,00

	Budget	Actual
Quantity	7.054	1.964
Sales Price	35,59	5,31
Turnover	251.053	10.420
Cost	14,91	0,18
Cost Amount	105.150	350
Contribution Ratio 1	55,91	96,46
Contribution Ratio 2	53,02	96,23

You can, however, still drill down to budget lines as previously.

5.1.5.2 Consolidation of sales budgets (6121)

If you work with a consolidated budget, you first create the budget in the usual way. Afterwards, you specify which budgets should be consolidated using a function, Consolidation specification, that lets you enter the relevant values.

When you have specified which budgets to consolidate, you update the consolidated budget using a function, Update consolidated budget.

The consolidated budget will now be the sum of all budgets specified for the consolidation.

5.1.5.3   Adjustment of sales budgets (using 6121 and 6224)

You can still adjust sales budgets, both directly in Work with budgets (6121) and in Regulate sales budgets (6224).

In connection with the adjustment of budgets, you can now specify a customer number to be used when importing sales prices. This is relevant in the following cases: for budgets in which the customer number is not part of the budget string, if you have a customer suited to use as the basis for budgeting sales prices (net), and if you use a budget price customer to go beyond the price agreements that are currently valid for a customer. This way you can also enter different sales price expectations by using different budget price customers.
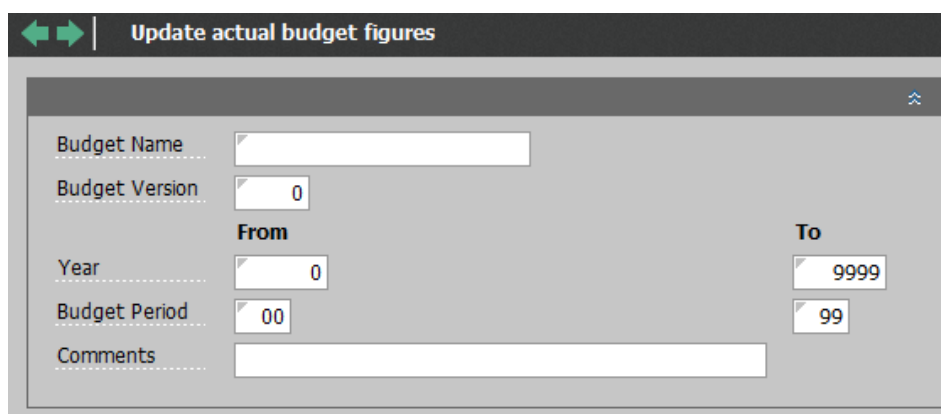
5.1.5.4   Copying sales budgets (6222)

Copying budgets will now be based on the actual values in the budget if you copy from actual figures. Copying from other budgets is naturally still possible.

5.1.5.5   Update actual budget figures (6226)

A new application has been developed for updating actual budget figures based on actual figures in the sales statistics.
What is updated, is the information about actual quantity, actual revenue and actual cost price.

5.1.5.6   Import of spreadsheet data to sales budgets (6222)

The purpose of this point is to enable our customers to maintain sales budgets in spreadsheets – and subsequently import them into a sales budget.

To simplify the maintenance of budgets, it will from now on be possible to maintain these in spreadsheets. This is the reason why it has to be possible to export and import budgets to and from spreadsheets.

Budgets in spreadsheets can either be created on the overall level with figures distributed across periods using a pattern of seasonal variation, or on line level.

The basic data used as the basis of the budget are numbers, revenue and cost amount.

A typical **import** of a budget will come from a spreadsheet looking like this:

H	Budgetnavn	Version	Via	Kunde	Vare	Valuta	Antal	Omsætning	Kostværdi	Sæsonmønster	Årstal	Startperiode	Antal perioder	Rabat	Fragt	Bonus	Provision	Q20
F	BUDDNR	BUDDVERS	BUDDVIA	BUDHKUNDE	BUDHVARE	BUDHVAL	BUDHMGD	BUDHOMS	BUDHKOST	BUDHSASON	BUDDAARTAL	BUDDAKBUPE	BUDDANBUPE	BUDHRABAT	BUDHFRAGT	BUDHBONUS	BUDHPROV	BUD
L	PRO 2015 DK	1	H	4711	PRO VARE1	DKK	47	10000	5000		2015	1	12					
L	PRO 2015 DK	1	H	4711	CAP- N5	DKK	48	5000	2000		2015	1	12					

A template spreadsheet will be available. The first row contains descriptive names, which can be used when entering data. The second row is a "code row" that cannot be changed because it controls the loading of the spreadsheet. The following rows are the budget rows.

In the spreadsheet, you can choose to create a budget based on the fields that are relevant for a specific situation. You are "allowed" to remove fields in the spreadsheet if you have no use for them.

Before you can import the spreadsheet, you have to create a budget definition in Work with budgets (6121). You specify a setup of budget fields and selection, and this setup forms the basis of the validation when loading the spreadsheet.

When you import data, please be aware that budget periods may be included that did not previously exist. In this case, the following rule applies: If the field in the spreadsheet is blank, nothing is updated in ASPECT4 Logistics, but if the field contains the value 0 (zero), the corresponding field in ASPECT4 Logistics is updated with 0.

The location of the spreadsheet and the file name has to be specified in ASPECT4 Business Connector (ABC) under Document setup – EG416.BUDGET.RCV – BUDGET:
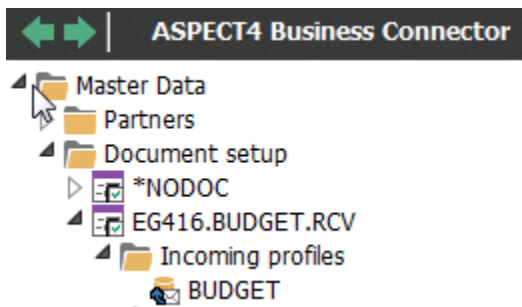
When this has been done, the import itself can be performed. This is done using Manage flat files (0654) where the following is specified:

First, all rows in the spreadsheet are validated. Budget updates are only performed if all rows pass the validation. This is done to avoid inconsistent content in the spreadsheet.

If the validation is not free from errors, you will receive error messages in the ABC error log, and if you have signed up for Event and Exception Manager for ABC, they will also appear here.

You find the ABC error log using ABC operation (0X70), where you can search for:
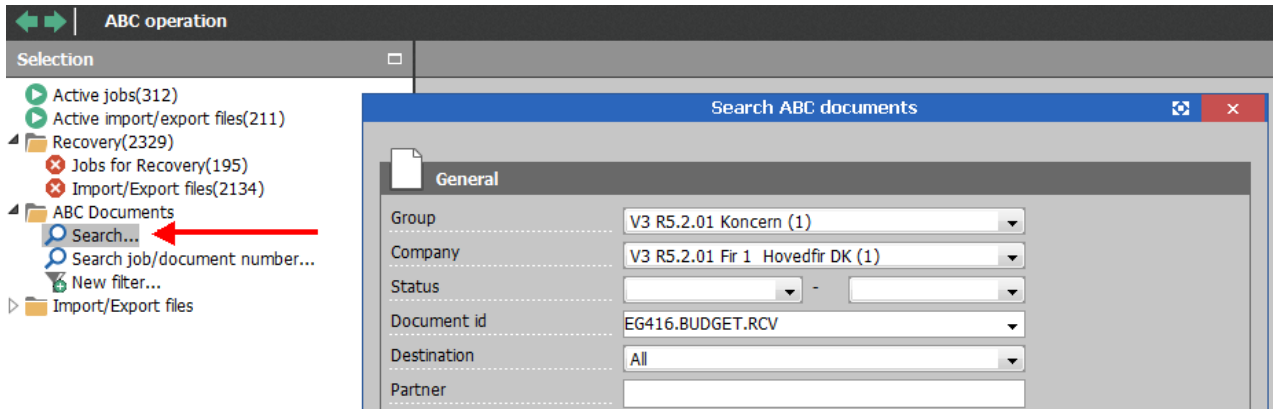
This might give a result like this:

5.1.5.7   Export of data to a spreadsheet

Export to a spreadsheet is done using QueryManager.

5.1.6   Convert sales budgets R4 to R5

You can convert budgets from the old budget structure to the new budget structure.

When a budget is converted, it will use the following naming convention: Budget revision turns into Budget name, and version is kept as it is.

The conversion is made on request using an application, Convert sales budgets R4 to R5 (622A). This means that only the relevant budgets should be converted. Deletions will be made in new budgets with the same budget revision and version, if they already exist.

5.1.7 Option for absolute variance in budget comparisons

I cooperation with ISOLA, an option has been added in Print budget comparisons (6424) of having variance calculated in absolute values.

The purpose of this new functionality is to ensure that oppositely directed variances do not even out each other and make the result look better than what it actually is.

5.2 Delivery follow-up

To enable better follow-up on deliveries, ASPECT4 Logistics has been expanded with tools for this purpose that can now be applied.

Delivery follow-up has been enabled on order header level.

Here, two concepts are used:

- DIFOT (Delivered In-Full, On-Time) or
- OTIF (On-Time In-Full).

In fact, they cover the same thing, but the different names reflect different "schools" of thought.

To assist the delivery follow-up, two extra fields have been added on our order headers and order lines:

- OT – On-Time
- IF – In-Full.

The field on the invoice order header is updated with a 1 (one) if all lines are OK – otherwise it is updated with a 0 (zero). In connection with updates of the invoice order header "Miscellaneous items" are skipped, since OTIF is directed at item deliveries.

On the order lines, everything is updated, also in case of "Miscellaneous items", since this can sometimes add value for our customers who deliver services.

On-time for a line:
Actual date = date on the delivery note of the invoice order. If this is 0 (zero), the invoice date of the invoice order is used. If this is also 0 (zero), the delivery date of the invoice order is used.

Confirmed date = "Original delivery date" of the invoice order. If this is 0 (zero), the "Delivery date" of the invoice order is used. This is used for calculating the date that is "number of days before" and "number of days after".

Example: Confirmed date = 17-09-2014. 3 days before = 12-09-2014 (because there is a weekend, i.e. inactive days). 2 days after = 19-09-2014.

If Actual date >= 12-09-2014 and <= 19-09-2014, then it is On-time.

In-full for a line:
Smallest quantity: The "Originally ordered number" of the invoice order * (100 - "Under delivery percentage") / 100.

Largest quantity: The "Originally ordered number" of the invoice order * (100 - "Over delivery percentage") / 100.

Example: "Originally ordered number" = 25 units and "Under delivery percentage" = 5% and "Over delivery percentage" = 3% makes 23.75 units and 25.75 units.

If "Ordered number" on the invoice order >= 23.75 and <= 25.75, then it is In-full.

On-time for an order:
All lines on the firm order are processed. If no firm order exists, the invoice order is used. Lines for which "Original delivery date" > Actual date, are skipped/not included in the On-time evaluation.

Calculation and control are performed like this:
Actual date = date on the delivery note of the invoice order. If this is 0 (zero), the invoice date of the invoice order is used. If this is also 0 (zero), the delivery date of the invoice order is used.

Confirmed date = "Original delivery date" from the firm order, if a firm order exists. Otherwise "Original delivery date" from the invoice order is used. If this is 0 (zero), the "Delivery date" of the invoice order is used. This is used for calculating the date that is "number of days before" and "number of days after".

Example: Confirmed date = 17-09-2014. 3 days before = 12-09-2014 (because there is a weekend, i.e. inactive days). 2 days after = 19-09-2014.

If Actual date >= 12-09-2014 and <= 19-09-2014, then it is On-time. If all processed lines are On-time, the order is On-time.

In-full for an order:

All lines on the firm order are processed. If no firm order exists, the invoice order is used. Lines for which "Original delivery date" > Actual date, are skipped/not included in the In-full evaluation.

Actual date = date on the delivery note of the invoice order. If this is 0 (zero), the invoice date of the invoice order is used. If this is also 0 (zero), the delivery date of the invoice order is used.

Calculation and control are performed like this:

Smallest quantity: "Originally ordered number" * (100 - "Under delivery percentage") / 100.

Largest quantity: The "Originally ordered number" of the invoice order * (100 - "Over delivery percentage") / 100.

Example: "Originally ordered number" = 25 units and "Under delivery percentage" = 5% and "Over delivery percentage" = 3% makes 23.75 units and 25.75 units.

If "Ordered number" on the invoice order >= 23.75 and <= 25.75, then it is In-full. If all processed lines are In-full, the order is In-full.

DIFOT/OTIF has to be calculated like this:

If you have to calculate DIFOT/OTIF for a period, you do it like this:

Number of orders on time and with the correct quantity / Total number of orders * 100%.

In relation to delivered quantity, the information saved in Delivery variances (6148) is taken into account, which means that a delivery can be considered complete even if it is not 100%.

A corresponding application has been developed for Delivery variances, sales (6145). This application has be structured like Delivery variances (6148) with an OGI structure, and the fields for presentation are "No of Days for Delivery Before" and "No of Days for Delivery After".

- *"No of Days for Delivery Before" reflects the number of active days before the specified delivery date that has been agreed upon with the customer as acceptable for in-time delivery.*

- *"No of Days for Delivery After" reflects the number of active days after the specified delivery date that has been agreed upon with the customer as acceptable for in-time delivery.*

It is only used for this follow-up and not for allocations or deliveries.

The applied customer group, if one is used, is specified in the system parameter "Delivery tolerances" (LEVADS).
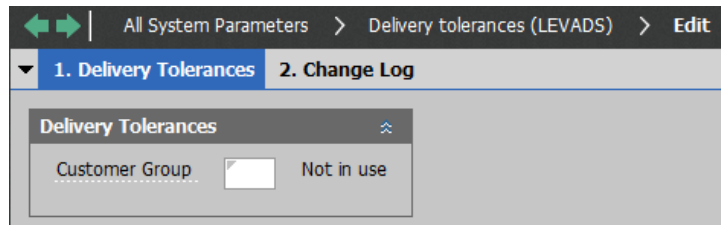
5.3 Print invoice copy based on original data

It is now possible to print an invoice copy based on the data that formed the basis of the original invoice in terms of master data such as customer name and address, VAT rate, etc.

The functionality has been implemented in Print invoices/credit notes (6235) and Print collective invoices/credit notes (6236) in the following way:
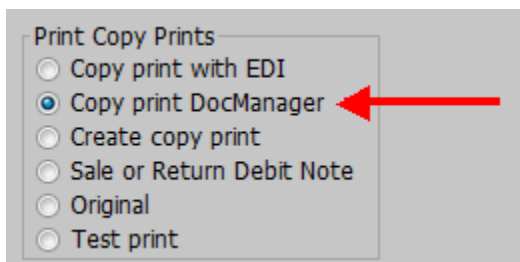
When you use Copy print DocManager, a print is created from previously generated DocManager data for the original invoice, whereas Create copy print generates new data for DocManager based on the invoice order.

When you use Copy print DocManager, there may be a small risk that the copy does not match the original 100%. The may happen if enrichment is performed in connection with the printing process itself and these data have been changed since the original was created, or if the templates used in DocManager have changed.

If no data exist for the original invoice, they will be recreated.

5.4 Changed handling of item sets

In cooperation with Expedit, we have developed functionality for changed handling of item sets.

The purpose of this item is to adjust the application of item sets to better reflect the everyday use.

Handling of item sets is changed in the following ways:

- When creating item sets on firm orders, the item set may be withdrawn from more blanket orders.
- It is now possible to make a combined deletion/completion of item sets.
- On internal purchase of item sets, the purchase can be priced according to the distributed amount from the sales statistics.

Withdrawal of item sets:

Until now, it has only been possible to make a call-off from a single item by "withdrawal" from another order type (blanket order/quotation).

The withdrawal logic for item sets has been changed so that when item sets are created on firm orders, you can withdraw from more offers/blanket orders; this makes the logic similar to call-off for regular order lines.

It is a prerequisite that the affected item sets on the firm order and the blanket order are "synchronous" in the sense that they comprise the same item set sub-lines. If this is not the case, and the item set of the firm order comprises an item set sub-line which is not found on the item set of the blanket order, this line will not be handled as a call-off. Correspondingly, call-off cannot be made from the item set sub-line of a blanket order if a matching line is not included on the firm order.

Furthermore, it is now made possible to deselect the manual acceptance before the withdrawal is carried out.

Overall deletion/completion of item sets:

When orders are being processed, you can block the deletion/completion of single lines in connection with item sets. Instead, you can carry out an overall deletion or completion of an item set. The deletion or completion of an item set is requested next to an item set header line. First, the system validates whether the change is allowed for all lines of the item set. If OK, the transaction is performed for the item set header line and all associated item set sub-lines.

For deletion/completion of item sets, special options are used. These are activated for the individual sales order line applications (6522-6526) with the application "Setup" (0128) and the parameter "OPTIONUDV":

- 24 = Delete item set
- 30 = Complete item set.

Pricing of internal purchase:

It is now possible to manage the pricing of transactions against item set lines on internal purchase orders in connection with intercompany settlement, Update based on derived orders (7261). In case of intercompany settlement, transactions against the internal purchase order are normally priced on the basis of the invoiced amount on the internal sales invoice order (the delivery order).

Note: If the sales order contains item sets that are priced using the item set header line, the item set sub-lines will not be priced!

If the item set sub-lines concern item numbers that are also bought/sold separately, the pricing of FIFO cost price-controlled holdings will be disturbed by these receipts at zero value.
In the above situation, the pricing of receipts transactions may now instead be priced on the basis of the potentially distributed item set prices from the sales statistics of the delivery order, if desired.

Of course, it is a prerequisite in this case that distribution of item set prices is used with the sales statistics. See the system parameter "Item set – Optimisation parameters" (VARESAET) for more information.

Changes in the system parameter "Module 3 – Sales management" (MODUL3)
Three new fields have been added:

Withdrawal from several orders in connection with call-off for item sets
In connection with creation as automatic call-off, you can select:

• Only one call-off from the first possible blanket order irrespective of the back order quantity.
• Only one call-off from the first possible blanket firm order if the back order quantity is sufficient.
• Automatic call-off from the required number of blanket order item sets (no more than a maximum of 10).

Control of deletion/completion in connection with item sets in sales order processing
You have the following options:

• Item set lines (item set header lines as well as item set sub-lines) can be deleted/completed individually (according to the same rules as ordinary order lines).

• Item set sub-lines can be deleted/completed individually, but deletion/completion of item set header lines result in deletion/completion of the entire item set.

• Deletion/completion of item sets can only be done on item set header lines, and the result is deletion/completion of the entire item set.

Pricing of purchase orders in connection with Intercompany

You have the following options:

- Invoice line price
- Sales statistics of the delivery order.

5.5   Sales order group for price correction

In cooperation with Icopal, we have developed functionality for crediting without influencing the warehouse – more specifically it is a price correction that only influences sales statistics, in addition to the financial accounts, but not the warehouse.

An advantage of this solution is that quantity-dependent prices are found automatically. You have the possibility of documenting to the customer exactly what you have changed. For example, if you have invoiced the customer 1 euro too much per item, the credit note will specify that it applies to 50 items with 1 euro off the price. Previously, the customer had to guess that the 50 euro amount on the credit note originated from 50 items with 1 euro each.

This method is well suited for supplying correct documentation of ex gratia credit entries. These previously had to be misused for carrying the cost of items on the credit note, which meant that the contribution on the customer was artificially high. The fictitious wastage costs in a situation like this will now disappear.

A new value has been created under the system parameter "Sales order group processing" (SOARTBEH). It receives the code value "PC" (price correction). A matching code has been created under the system parameter "Sales order group" (SOART).

The following functionality is applied:

- The type can only be used for invoice or credit orders.

- The type is added to the order header in connection with transfer from another type (invoice/credit order).

- The type can be added to a manually created invoice/credit order.

- When transferring from invoice order to credit order (Ctrl+Alt+I), the prices/charges are the same. The transfer happens in the usual way using a list image where only the specified lines are transferred (they can be edited for quantity). If required, charges can be suppressed the usual way using the request image.

- If you create a PC invoice or PC credit note manually, the order lines and charges are created in the usual way (searching for sales prices, discount, charges, etc.).

For lines associated with PC orders, the following applies:

- Lines are neutral in terms of arrangement. This means that they do not appear in material profiles etc.
- Lines are neutral in terms of cost price. This means that cost amounts are always 0 (zero).
- Lines are neutral in terms of warehouse. This means no warehouse updates, history, etc.
- Lines are quantity neutral in terms of sales statistics. This means that only amounts are updated.

PC orders cannot/should not be applied to internal customers.

5.6   Re-invoice a credit note

You can now transfer a closed credit order to a new invoice order.

A copy of the information on the credit note forms the basis of a matching invoice order. This means that you do not have to enter data manually and avoid the risk of introducing mistakes.

With this transfer, prices and charges from the credit order are kept, which means that any suppressed charges are still suppressed on the invoice order. In this situation, lines are also transferred using the list image, but here all lines are normally transferred. (However, we will not block the possibility of making selections/changes.)

5.7   Validation of VAT numbers on delivery addresses

The purpose of the task is to be able to document that VAT numbers on delivery addresses have been validated. The reason for this is the auditing requirement that you have to be able to document that the VAT numbers used for reporting to public authorities, are validated at regular intervals. As a minimum, companies have to validate their VAT numbers once every three months.

In connection with Release 4, a product, VIES, was released for validation of VAT numbers for debtors and creditors.

Now we are also able to validate the VAT numbers specified on delivery addresses.

We have developed an application, Validation of VAT number via VIES (6289).
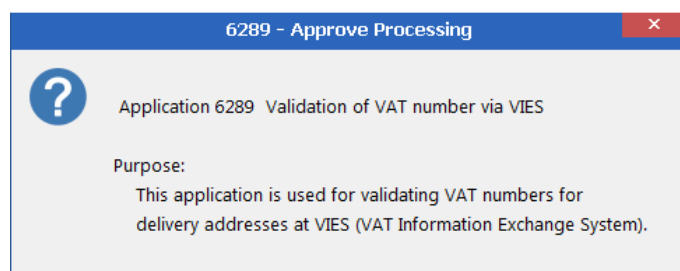
This application runs through the customer delivery addresses for each company. Only delivery addresses within the EU (incl. Denmark) are processed.

When the run has been completed, you can see the results in VAT validation VIES (1380).

	Customer	Country	VAT no.	VIES - Name	VIES - Address	EU Request ID	Name 1	Name 2	Street
4	12	DK	5678980123	---	---			Kaspers test kunde-12	Banegårdsplads
5	16	DK	123456789012345	---	---		Kunde intern firma 1	Mr. EDB Gruppen	Dusager 4
6	17	DK	70000123				Kunde intern firma 1	Mr. EDB Gruppen	Dusager 4

5.8 Maintain weight on package list

You can now change the weight on line level in Packages (6154), and the changed weight is summed up in totals and distributed across the materials arrangement.

5.9 Prevalidation of journals for sales order transactions

In cooperation with Kyocera Unimerco, we have developed new functionality for validation of journals for sales order transactions before these are updated.

If an error is found on just one of the lines, the journal is considered erroneous, and it will be left as, but marked with a note saying that it has messages that require manual handling.

Erroneous journals and lines have status 30, and the messages explain the cause of the error.

In the application parameters for the application "Implement sales order transactions" (6201), you specify whether you want to use prevalidation.

You specify the rules using the following parameters:
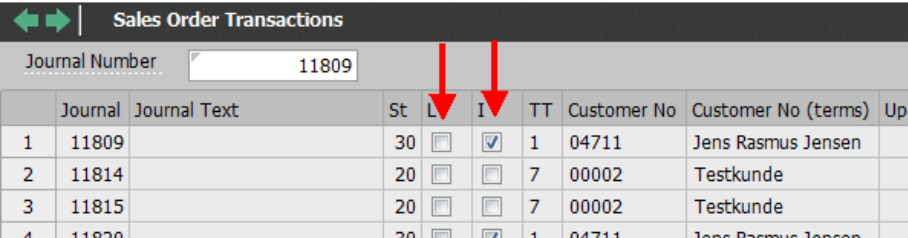
Order generating method . . . . . . (0-3)

- 0: Do not create a new sales order for each transaction line. No prevalidation.
- 1: Create a new sales order for each transaction line. No prevalidation.

- 2: Same as 0, but including a prevalidation.
- 3: Same as 1, but including a prevalidation.

In addition, it is specified which application number to use as the validation application for the prevalidation. If no value is specified, data will be loaded for Application 610C, which means that the validation is performed as in the standard application "Sales order transactions" (6101) on line level when you are maintaining a line.

You may want to create a setup where it is displayed if a journal or journal line has messages:

6 Warehouse

6.1 Reverse signs on JP transactions on historical voucher date

When performing transactions on a historical voucher date on an item number which is controlled by standard cost, the sign preceding quantity and amount on the created JP stock history transactions is reversed in comparison with the financial transactions. Since the financial transactions are considered the most correct, the signs have now been reversed on these JP transactions.

From now on, warehouse updates will ensure that the preceding sign is correct in order to achieve that the stock history always reflects the corresponding financial transactions.

6.1.1 Conversion

In connection with upgrades to Release 5, these stock history transactions will be changed to match the conditions described above.

6.2 Connection between stock history and financial transactions

In cooperation with Icopal, we have developed functionality for reconciling stock history against financial transactions.
The purpose of this solution is to create the basis for a more precise reconciliation between stock history and financial transactions.

Stock history (LAHITBL) is expanded with a new field, Journal line finance (LAHIJOULFI), which makes it possible to connect a stock history record with the corresponding financial transaction of the stock value.

Transactions created before the implementation of Release 5 cannot be reconciled using the new field.

With this solution – excluding transactions created with Update cost prices (9238) – you will be able to create a one-on-one connection between the stock history record and the corresponding financial transaction record of the stock value.

With Stock history (LAHITBL) as the primary file, you can connect Stock history (LAHITBL) and Financial transactions – Lines (FITLTBL) using the following fields:

- Journal type   (LAHIJOUTP)
- Journal number   (LAHIJOUNR)
- Journal line finance   (LAHIJOULFI)

and:

- Journal type   (FITLJOUTP)
- Journal number   (FITLJOUNR)
- Journal line   (FITLJOULIN)

The total of Amount (LAHIBELQB) and Amount (FITLBELQB) should in this case be 0 (zero).

For transactions created with Update cost prices (9238), two transactions are created in Stock history (LAHITBL) for each cost value change:

- One for the current stock on the new cost value
- One with the opposite value (plus/minus) on the old cost value.

Only one financial transaction is created with a quantity of 0 (zero) and the value difference.

If you want to reconcile this type of transaction, you first have to create a work file for adding the amount values for the inventory transaction with the same value in:

- Journal type   (LAHIJOUTP)
- Journal number   (LAHIJOUNR)
- Journal line finance   (LAHIJOULFI).

Only records with Journal type (LAHIJOUTP) = JP and Journal line finance (LAHIJOULFI) > 0 are included.

Afterwards, the values in the work file can be compared with Financial transactions – Lines (FITLTBL) as described above.

6.3   Value settlement of a zero holding

In cooperation with Icopal, we have developed functionality for value settlement of a zero holding.

Sometimes a value of stockholding may exist for a zero holding on the warehouse if the inventory transactions are erroneous. This typically happens because the holding has been negative.

The purpose of this task is to eliminate values on zero holdings.

When the total holding for an item number, with either the cost price method "FIFO cost price" or "Average cost price", becomes zero, it may happen ,in special cases, that the registered value of stockholding does not become zero at the same time.

In connection with the continuous update of the warehouse, it will in this case be checked if relevant holdings have become zero and if a remaining value of stockholding exists. See Help for the application "Print inventory journal" (9201).

If this is the case, the difference is posted on a price adjustment with the inventory transaction type specified here.

IMPORTANT: Having a value for a zero holding is not a normal situation! Most often this happens as the result of an unintended workflow, so in every case it is important to follow up on the reason for this to make sure that the same problem does not occur again. This is also the reason why the special inventory transaction type specified here should not simultaneously be used for other purposes.

You have to set up a value on the system parameter "Standard cost setting – Optimisation parameters" (KOSTPRIS):

If the value of the parameter specified here is blank, no adjustment of the value of stockholding is performed.

If you want the value adjustment to be performed, the parameter should point to an inventory transaction type created under the system parameter "Inventory transaction type" (LAGERTR). The specified transaction type in the field "Transaction type for inventory statistics" (VIRKLSSTAT) must have the value JP. (If this is not the case, the JP transaction type is used instead.)

6.4 Version for check of holding on the transit warehouse

A change has been made, so "Check against transit warehouse in connection with stock transfer" is performed with a version for allocation checks (normally "ALLOK"). This version is specified in the system parameter "Version for automatic allocation" (MATPROFD).

6.5 Calculation of stock value for transit warehouses

Since transit warehouses have holdings placed in locations that match the orders they are related to, the holdings in transit warehouses are counted per item, variant, consignment, warehouse and location, whereas in other warehouses, they are is counted per item, variant, consignment and warehouse.

6.6 Calculation of minimum stock based on forecasts and budget numbers

In cooperation with ISOLA, we have developed functionality for calculation of minimum stock based on forecasts and budget figures.

The purpose of this element in the release is to provide a better basis for the continued work with the value in "minimum stock".

A new application has been developed, Estimate Basic Item Info from Forecast (9214), which can calculate and update basic item information on the basis of the forecasts. "Usage per day" is the calculated value.

Usage per day is calculated as a forecast total for the specified item number in the specified forecast period and divided by the number of active arrangement days in the period, which is found using Company calendar (9175).

It is a prerequisite that you use forecasts. These can be created using Transfer sales budget to forecasts (6221). A prerequisite for this is that your budget is created on item number level.

Start-up parameters for Estimate Basic Item Info from Forecast (9214):

7 Purchase

7.1 Keep prices and discounts when splitting purchase order lines

In cooperation with Kyocera Unimerco, we have developed functionality for keeping prices and discounts when splitting purchase order lines.

The purpose of this is to be able to keep prices and discounts when splitting purchase order lines. Since a split often happens when a supplier cannot deliver the entire quantity at the same time, you would want the possibility of keeping the prices/discounts that are related to the full quantity.

An option has been added to the system parameter "Purchase price setting – Optimization parameters" (INDKPRIS):
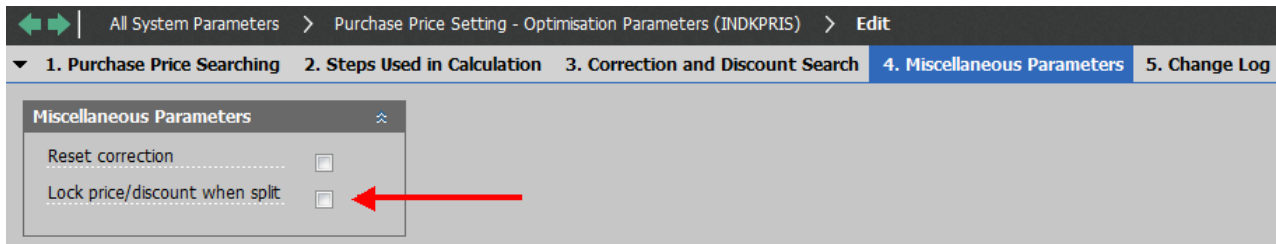
If you apply a lock, the price list type on the order line is automatically set to "L" (price and discount locked) on both the new and the edited purchase order line. However, locking of price and discount rates will never take place if the price list type is "M" (manual price) or "B" (line amount). A locked price can be changed if you manually change the price list type of the order line.

Prices and discounts are locked even if you change the pricing date.

7.2 Supplier invoice receipt cockpit – Archiving under order number

In cooperation with C.C. Jensen, we have developed new functionality for the supplier invoice receipt cockpit.

Functionality has been developed to enable archiving of supplier invoices which are either scanned, registered in "Pre-entry of supplier invoices" (1241) or in "Supplier invoice receipt cockpit" (7066) under the order number that the supplier invoice is related to.

The setup is made in the parameters for "Display voucher in archive" (1614) and belonging to "General files – Setup of ID against voucher archive" (section 1614) using ASPECT4 Financial Management. You can find more details about this in the Financial Management section of these release notes.

7.3 Purchase order proposals and forecasts – Shortcut to 7123

In cooperation with Danapak Flexibles, we have created functionality for calling options in "Purchase order proposals" (7123) using an application-dependent shortcut.

In many places, there can be a need for creating a purchase order proposal, e.g. from "Stockholdings" (9145), and for transferring the item number into the creation of a "Purchase order proposal" (7123).

7.4 Order status is set to 25 when printing a request for a purchase order

In cooperation with Kyocera Unimerco, we have developed new functionality for setting the order status on confirmed purchase orders (order type 40) that are updated in connection with print of a request.

If the order status for a confirmed purchase order is below 25, the status will be set to 25 on the order header and order lines in connection with "Print purchase orders" (7232).

This makes it possible to see in material profiles if a request has been printed for an order that is not yet initiated.

In addition, a setup on the system parameter "Intercompany check of status for derived orders" (ICAFLCSA) makes it possible to block unintended editing of the order line.

7.5 Order numbers are specified when scanning in Update OCR-scanned invoices

Update OCR-scanned invoices (7266). When you receive a supplier invoice through scanning, there is now a change in the use of the field in the table "Expanded payment terms" (KREOCRT1). Now the order number is left aligned in the field "Requisition number" (OCRREKV), and the update status is found in the field "Feed system use" (OCRBRU). Both were previously found in the field "Free field for C solutions" (OCRFRI), which is intended for C customisations.

7.6 Improved processing of IG orders (direct delivery)

The purpose of this task is to achieve better control in connection with feedback from IG purchase orders.

The registration of the receipts journal for IG purchase orders is unchanged from Release 4, but the subsequent processing of the parent sales order has been changed.

Up to and including Release 4 the post-processing consisted of the following possible steps:

- Allocation of a sales order line
- Creation of a despatch journal   ("pick list" for the direct delivery)
- Completion of the despatch journal   (created invoice orders)
- Print of an invoice order.

Allocation could in this case include more than the delivery itself, depending on the setup. If transport location control was not used, the allocation could include stockholdings intended for other purposes.

From Release 5 the post-processing happens using "Update based on derived orders" (7261). During the update, sales order transactions are created for the transfer from firm order to invoice order. The transferred quantity in this case usually (depending on the setup) corresponds to the difference between the total goods received quantity on the purchase order and the previously delivered quantity on the firm order. A sales order journal is created per purchase order. The journals will temporarily appear in "Sales order transactions" (6101), but are normally processed automatically, through "Implement sales order transactions" (6201), when the processing with "Update based on derived orders" (7261) has been completed. If a sales order journal for some reason cannot be completed, a new journal is automatically created, the next time "Update based on derived orders" (7261) is run.
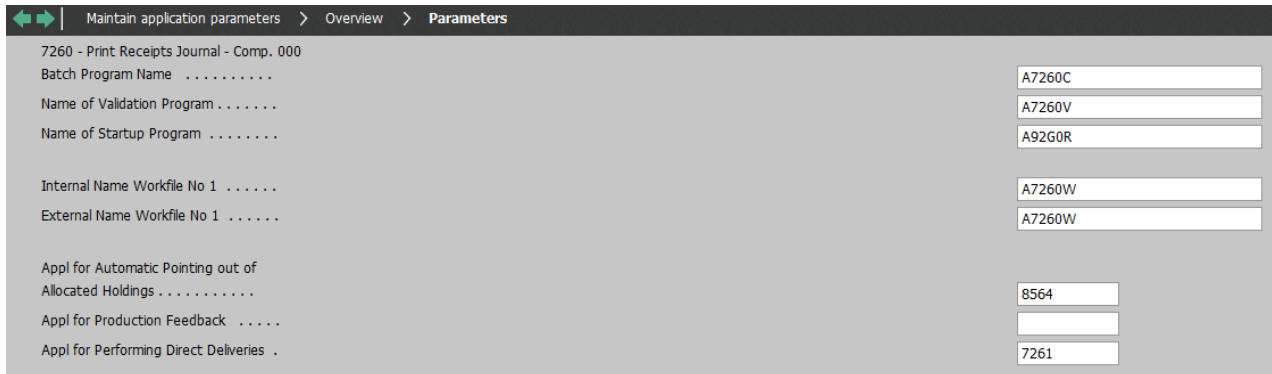
During the automatic run of "Implement sales order transactions" (6201), invoice orders are created. The status etc. for these are controlled by the extra parameter "OVERFQR" for the general 128 setup for "Implement sales order transactions" (6201):

This ensures that the customer is invoiced during the next general invoice run.

Print receipts journal (7260):

This is done to complete IG deliveries using the application 7261.

Update based on derived orders (7261) – extra parameter "Purchase order group" (ORDREART):

Processing of Sales Order:

0	No processing
1	Sales order transactions are created on transfer from firm order to invoice order, or – if the parent order is an invoice or credit order – the order line status is set to 60. (Transaction type 6). The transaction quantity is the difference between the invoiced quantity and the goods invoiced quantity.
2	Like "1", but the transaction quantity is the difference between the delivered quantity and the goods received quantity. The goods received quantity is in this connection interpreted as the quantity received at the receiving warehouse and not at a transit warehouse, if this is used.
6	The sales order line is allocated, but the transfer is not carried out. The quantity allocated is the available holding of the current item (item number and any variant specification and consignment number) in the current warehouse/location number. (This does not necessarily correspond to the quantities received, but can also include other available holdings. If you only want to allocate the received quantity, we recommend that the receiving warehouse is transport location controlled).

If you have chosen "No processing" here, the processing, if any, will be completed in connection with the subsequent run of "Update receipts journal" (7260).

The values displayed here are general and not directed specifically at transfer of IG sales orders. Any additional overrides can be performed using the system parameter "Reference for application with application dependency data batch" (APPLAFHD).

We recommend that the system parameter "Warehouse number for direct delivery" (DIRLEV) is set up for the order policy "Purchase – Delivery direct to customer" (IG), and that it points to a direct warehouse with transport locations.

In addition, we recommend to run "Update based on derived orders" (7261) at least once a day to ensure that as much as possible is invoiced from the stockholdings with direct delivery.

Note: In contrast to Release 4, print of created IG invoice orders does not happen automatically. If you have not already set up a general schedule for print of invoices, you may want to do this.

8   Production

8.1   Production feedback – Number of minutes between warehouse updates

In cooperation with Scantruck, we have developed functionality for production feedback.

The number of minutes between warehouse updates is now by default 0 (zero) the first time an application is called for a user. After the first use, this value is saved as a fixed parameter, which is reloaded for subsequent application calls. The point of using a default value of 0 is to make the value more usable already from the beginning. When the value is 0, warehouse updates are performed continuously, which is a requirement in connection with the use of FIFO prices.

9   One system

9.1   Expansion of the payment term code to 3 digits

You can now handle up to 999 payment term codes, since the number of digits has been expanded from 2 to 3.

Payment term codes are now used in a number of applications and system parameters as well as in the ABC integration and other integrations. Changes have been made in a number of applications as well as in the following:

ABC integration:
- INVOIC
- OIO
- ORDERS
- ORDRSP
- QUOTES
- DELFOR.

DocManager prints:

- 6230 Pro forma invoice
- 6231 Offer
- 6232 Order confirmation
- 6235 Invoice/credit note
- 6236 Collective invoice/credit note
- 6254 Package list
- 7232 Order
- 7233 Reminder.

Other integrations:

- 9283 Update finance system (field definition for transfer to finance).

It may be necessary to adjust queries if they include special formatting for payment terms. The same applies to workflows that use payment terms, and other integrations.

9.2   Consolidated submission of EU VAT (EU Sales List)

The purpose of this point is to enable our customers to create a correct and consolidated EU sales list by calling a single application.

A change has been made, so data for the EU sales list in ASPECT4 Financial Management can now be enriched with data from ASPECT4 Logistics. This way all reporting of the EU sales list to the tax authorities can now be handled using "List information (EU VAT)" (2437). This includes data related to triangular trade and service amounts collected in ASPECT4 Logistics.

It is a prerequisite that an audit trail has been set up between ASPECT4 Logistics and ASPECT4 Financial Management.

9.3   History (F2) for fields

The purpose of this point is to use the same method for showing data history in ASPECT4 Logistics as the one already implemented in the rest of ASPECT4.

You can ask for the data history in work-with and request applications. This happens by using the F2 function key as you know it from the other subsystems in ASPECT4. This functionality can be used both from list and field images. You will not find a visible function key in the Ribbon in field and list images.

However, in the shortcut menu you will find the option for displaying History:

If the current database and field have been registered for inquiry into data history, you will be able to display a new screen with the field history by pressing F2 in a field.

The registration for history takes place in ASPECT4 Business Integrator (0060). You find a description for this in the release notes for ASPECT4 Foundation.

10 Intercompany

10.1 Cross/Docking (Re-arrange purchase order)

The purpose of the task is to be more agile/flexible in the item flow in ASPECT4 Logistics. It is introduced to fulfil expressed wishes to be able to re-arrange after a confirmed purchase order has been initiated. Examples of these wishes are to be able to change an order to go through the warehouse even if it was planned for direct delivery, or vice versa.

Using "Re-arrange purchase order line" and "Re-arrange production order", the ordinary user can perform the wanted rearrangement. The required initial controls are performed, and you do not have to manually delete the subsidiary order lines or enter the parent order lines again. The purchase order lines can simply be moved to another supplier, another purchase order group or possibly to in-house production. In the same simple way, a planned in-house production can be moved to purchase from an internal or external supplier.

Using "Re-arrange purchase order", the ordinary user can also perform the wanted rearrangement. The required initial controls are performed. The purchase order number is not deleted, which can ease communication with the supplier.

It will be possible to re-arrange derived purchase orders after the purchase order is created and possibly initiated. For example, an order can be changed to go through the warehouse even if it was planned for direct delivery, or vice versa.

10.1.1 Re-arrange purchase order lines and Re-arrange production order

The solution is an extension of the "Re-arrange purchase order line" function, which was developed for Release 4 along with "Re-arrange production order". Rearrangement can now be performed on a derived purchase order line attached to an external supplier or on a derived production order.

This enables you to:

- Change the purchase order group for a planned external purchase order line
- Change a planned external purchase order line to purchase from another supplier (internal/external)
- Change a planned external purchase order line to in-house production
- Change a planned production order to purchase from a supplier (internal/external).

When you use this rearrangement, a new order is always created. If purchase order lines attached to the same parent order are moved individually, these will normally be moved to the same new purchase order (depending on the order policy and the setup of the system parameter "Intercompany – Manage derived orders based on order policy" (ICAFLEDO)).

10.1.2 Re-arrange purchase order

With the new function "Re-arrange purchase order", you can now perform one of the following rearrangements:

- Change derived external purchase order from going directly to the customer (IG) to going through the warehouse (IS/IO)
- Change derived external purchase order from going through the warehouse (IS/IO) to going directly to the customer (IG)
- Change derived internal purchase order from going directly to the customer (CF) to going through the warehouse (CO)
- Change derived internal purchase order from going through the warehouse (CO) to going directly to the customer (CF).

The rearrangement includes all purchase order lines on the purchase order.

Limitations for "Re-arrange purchase order":

- All lines on the purchase order have to point to the same parent sales order.

- An external purchase order cannot be changed if a goods receipt has been registered for the purchase order (either to a transit warehouse or the receiving warehouse). It is permitted that a printed purchase order can be changed, but this requires that you ensure the appropriate communication with the supplier yourself in order to notify them about the changed delivery address, e.g. by sending the order again.

- An internal purchase order can be changed until the sales order in the supplying company has been taken out for despatch. In this case, there will be no need for communication since the delivery note etc. will have the correct address after the implementation of the change.

- If an internal purchase order is combined with an IG delivery from an external supplier through its subsidiary order, changes are not allowed. (It would be too complicated to control this in practice, so we decided not to enable this possibility.) However, if the IG order is re-arranged first, the internal purchase order can be re-arranged afterwards.

- A purchase order (both internal and external) cannot be changed if it is not attached to a parent sales order.

"Re-arrange purchase order" can be requested from Confirmed purchase orders (7102) by specifying the current purchase order number. The start image will be the same as for "Re-arrange purchase order line" except that fields for order line numbers and new supplier number are not displayed:

The parent order number for the specified purchase order is displayed, and a new order policy can be specified. For external purchase orders you can only select another external purchase order policy (IG/IO/IS), and for internal orders you can only select another internal purchase order policy (CF/CO).

Before the change is implemented, a control is performed to check if the status for the order header as well as for all affected lines is OK. If this is not the case, an error message is displayed, and further processing is not possible.

If the status is OK, the following is implemented:

- All sales order lines on the parent order are changed with the new order policy, and the warehouse number is updated in the same ways as it would be for line creation.

- The purchase order is changed in a similar way. The purchase order number is kept, and only the necessary data are updated.

Please note that in contrast to rearrangement on line level, as described in section 10.1.1 Re-arrange purchase order lines and Re-arrange production order, a new purchase order is <u>not</u> created.

It is a prerequisite that the shipment date, delivery method, shipment vendor etc. of the parent order are updated manually.

Alternatively, the rearrangement can be requested indirectly using Firm order lines (6524). Here you specify one of the lines that refer to the wanted purchase order. The change will then be implemented exactly as if it was activated from the purchase order.

10.1.3   Future business procedures

When renegotiated rearrangements are performed today, it happens with the sales orders/sales order lines as the starting point system-wise. In the future, the workflow will instead use the purchase order/purchase order lines as the starting point.

The workflow in connection with rearrangement of a production order or a purchase order line (see section 10.1.1 Re-arrange purchase order lines and Re-arrange production order) remains unchanged. This is done by requesting the rearrangement next to the production order or purchase order line that you want to rearrange. In this case, the rearrangement always includes transfer to a new order number.

As a new option, you can now rearrange an entire purchase order as described in section 10.1.2 Re-arrange purchase order. The rearrangement is requested next to the purchase order that you want to rearrange. When the rearrangement is implemented, the purchase order number is kept.

10.2   Automatic run of Update based on derived orders

I cooperation with Cocio Chokolademælk, new functionality has been developed to implement Intercompany feedback through onward processing steps (automatic call of "Update based on derived orders" (7261) in the parent company when an invoice order with sales order group CO/CS in the subsidiary company is put in status 90).

This makes it possible to create (and include) an invoice or delivery note from the sales company, even if the supplier company is in charge of despatch.

11 Cross-disciplinary improvements in ASPECT4 Logistics

11.1   Use of Event and Exception Manager in ASPECT4 Logistics applications

A large number of applications can now distribute error and notification lists using Event and Exception Manager, since these list tend to disappear among everyday tasks if they are only added on a list.

In System texts (9167), you can specify for each message how it should be handled:

- The notification or error message is handled like today, i.e. it is added to an error or notification list.

- The notification or error message is sent to the Event and Exception Manager which will handle it, but it will also be added to an error or notification list.

- The notification or error message is sent to the Event and Exception Manager which will handle it, but in future applications it will no longer be added to an error or notification list.

- The notification or error message will be ignored in future applications.

It is also possible to specify a code for the individual error message to indicate how "severe" it is considered to be (Severity), and whether it should trigger an instant error notification (Critical). This way the individual user can specify which types of messages they want to receive from Event and Exception Manager.

This functionality is included in the following applications:

- Implement sales order transactions (6201)
- Print pro forma invoice (6230)
- Print quotations (6231)
- Print confirmations (6232)
- Print delivery notes (6233)
- Print delivery update (6234)
- Print invoices/credit notes (6235)
- Print collective invoices/credit notes (6236)
- Implement derived order transactions (6241)
- Implement despatch journal (6259)
- Print purchase orders (7232)
- Print reminders (7233)
- Print receipts journal (7260)
- Implement feedback for IC orders (7261)
- Import pre-entries (7265)
- Breakdown sales plan (8211)
- Print production feedback (8260)
- Receive feedback (8262)
- Complete order batch (8271)
- Calculate production variances (8272)
- Print inventory journal (9201)

- Calculate costs (9236)
- Update cost (9238)
- Change of cost price method (9240)
- Update implemented inventory transactions (9260)
- Implement onward processing steps (9272)
- Update finance system (9283).

11.1.1 Implementation guidelines

You have to create the additional areas that ASPECT4 Logistics will use under "system areas" in the application "EEM":

- SALES
- PURCHASE
- PRODUCTION
- WAREHOUSE
- COST PRICE
- ADMINISTRATION
- FINANCE.

The use of Event and Exception Manager has not been changed. If it is the first time you use Event and Exception Manager, you can request further assistance.

11.2 Split of address fields in ASPECT4 Logistics

The purpose of the new address concept is primarily to honour a number of demands from the outside world (e.g. the Danish OIO standard, UPS, DHL, FedEx) about adding structure to unstructured addresses.

This means that it is no longer sufficient to send addresses as a sequence of lines when trading partners exchange documents. Information has to be split up into its "smallest units" which makes it easier for the recipient to interpret the information – for example, street name, street number, postal code and city name should be sent as four separate units of information.

For this purpose, the new address concept offers facilities for both conversion of existing address information and subsequent maintenance of this information.

In addition to adding structure to addresses, the system will also save geolocations for the valid addresses which can later be used from other ASPECT4 applications, e.g. apps.

This simplifies integration to systems that use split of addresses, since the individual subelements are available directly in ASPECT4.

The solution is implemented in the following contexts:

- Customers (2111)
- Delivery addresses for customers (6129)

- Suppliers (3111)
- Receiving addresses (7129)
- Quotations and Orders (610x)
- Sales order transactions (6101)
- Implement sales order transactions (6201)
- Purchase orders (710x)
- Freight dockets (6192).

For the applications in ASPECT4 Logistics, you have to specify in the system parameter "Use of address formatting" (ADRSPLIT) whether to try to split the address.

When creating an address from an area marked positively for the new system parameter, a common function in ASPECT4 is called.

The data are validated using a code that is specified in "General files – Address maintenance codes" (section 260) per country.

The validation is performed against the specific address, and the data are enriched and split up.

If the process is successful, the address will be written in both the standard format and the split-up format. The usual files contain data in the same way as they always have, but in addition the split-up address is written in its own tables. You simply continue the workflow that you are in.

The screen below is displayed if an error occurs in the address validation of the address included in the validation call – for example, if the address cannot be recognised by the applied API, and consequently cannot be converted to a geolocation and/or the correct formatting.

In this example, the screen is displayed because the address has several entries. The used URL (in this case for the Google API) is displayed at the bottom and can be copied to the browser address line if you want to manually test the function. The two "Lock fields" check boxes are used if you want to lock the top and/or bottom part of the screen for keyboard entry.

The split-up result is displayed in the bottom half of the screen, and any errors/warnings are displayed at the bottom.

The only possibility of leaving the screen is to use Cancel/Exit (F12/F3), which exits WITHOUT performing an update, or Approve (F16), which exits WITH an update. You then continue the workflow that you are in.

11.2.1 Supported countries

Currently, the solution applies to Denmark and Norway, but we have also been working with the following countries. These countries are, however, not fully tested, which will not be done until a customer wants to use them. Please contact your consultant if you want to use these countries:

Country code	Country	Status
AT	AUSTRIA	Should be OK
AU	AUSTRALIA	Should be OK
BE	BELGIUM	Should be OK
BG	BULGARIA	Should be OK
CA	CANADA	Should be OK. Google does not work if the entire postal code is entered, but it should be OK, if only the first 3 characters are entered. Yahoo is OK.
CH	SWITZERLAND	Should be OK
CN	CHINA	Does not work We cannot find examples that work. For example, Yahoo does not support China, only Hong Kong.
CS	SERBIA AND MONTENEGRO	Does not work We cannot find examples that work.
DE	GERMANY	Should be OK

ES	SPAIN	Should be OK
FI	FINLAND	Problems with special characters, e.g. ä. Neither Google nor Yahoo works.
FR	FRANCE	Should be OK
GB	UNITED KINGDOM	Should be OK. Google does not work if the entire postal code is entered, but it should be OK, if only the first 4 characters are entered. Yahoo works in most cases. Works depending on how the address is entered.
GR	GREECE	Works with the Latin alphabet.
IE	IRELAND	Does not work. They have no postal codes. The module does not know how to interpret and find the address. Mask does not work. Should it be specified in section 0260, where the fields are? According to their website, they will get postal codes in 2015.
IS	ICELAND	Should be OK. Google does not work. Yahoo is OK.
IT	ITALY	Should be OK
NL	NETHERLANDS	Should be OK. Google does not work if the entire postal code is entered, but it should be OK, if only the first 4 characters are entered. Yahoo is OK.
PT	PORTUGAL	Problems with special characters, e.g. ó. Neither Google nor Yahoo works.
SE	SWEDEN	Problems with special characters, e.g. ä. Neither Google nor Yahoo works. Google works best if ä is replaced by a.
US	UNITED STATES	Should be OK. Google does not work if the entire postal code is entered, but it should be OK, if only the first 5 characters are entered. Yahoo is OK.

If you want to use other countries, this can be implemented as ordinary development. There is a large variation in the efforts that are needed to support a country, since some countries have a more complex address structure than others. We expect to need 10-12 hours (+/- depending on the country). We expect to expand the list of countries continuously.

11.2.2   Implementation guidelines

All you need is internet access from the server.

When you want to handle a country using this new functionality, you have to create an entry in "General Files – Address maintenance codes" (section 260).

Section 260 is used for managing the functionality of the address APIs. Here, you specify e.g. which API is used for address splitting and geolocation, whether the address should be formatted in a specific way in the input part, etc.

You can have a general setup for which you do not specify a country, and then you create a setup with the relevant information for the individual countries.

	System	Function	Subfunctio	Country	Descriptn	Web api.	Remove bl.	Comma lin.	Name split	Name1	Name2	Filler	Addr. val.	Filler
1	402	CUS	PRI	DE	DE opsæt til kunder Tyskland	1	0	0	0	0	1	0	0	3
2	402	CUS	PRI	DK	DK opsæt til kunder	6	0	0	0	0	1	0	0	3
3	403	VEN	PRI		Gen. opsæt til leverandører	1	0	0	0	1	1	0	1	1
4	403	VEN	PRI	DK	DK opsæt til leverandører	6	0	0	0	1	1	0	1	1
5	416	CUS	ORD	DE	Tyskland - Salgsordre	1	0	0	0	1	0	0	0	3
6	416	CUS	ORD	DK	Danmark - Salgsordre	6	0	0	0	1	0	0	0	3
7	416	CUS	SEC	DE	Tyskland - leveringsadresser	1	0	0	0	1	0	0	0	3
8	416	CUS	SEC	DK	Danmark - leveringsadresser	6	0	0	0	1	0	0	0	3
9	416	CUS	SEC	NO	Norge - leveringsadresser	1	0	0	0	1	0	0	0	3
10	416	CUS	SEC	SE	Sverige - leveringsadresser	1	0	0	0	1	0	0	0	3
11	416	CUS	SEC	US	USA - leveringsadresser	2	0	0	0	1	0	0	0	3
12	416	FRG	RCV	DK	Danmark - Fragtbreve - Modtag	6	0	0	0	1	0	0	0	3
13	416	FRG	SND	DK	Danmark - Fragtbreve - Afsend	6	0	0	0	1	0	0	0	3
14	416	VEN	ORD	DE	Tyskland - Indkøbsordre	1	0	0	0	1	0	0	0	3
15	416	VEN	ORD	DK	Danmark - Indkøbsordre	6	0	0	0	1	0	0	0	3
16	416	VEN	SEC	DK	Danmark - modtagelsesadresser	6	0	0	0	1	0	0	0	3

Text.	Denmark - Salesorder
WEB API. (1=Gooogle, 2=Yahoo, 3=Oiorest 4=*Opsmap, 5=*MS-Bing, 6=Card supply)	6
Remove blank lines . . . . . (1=Yes).	0
Create line at comma . . . . (1=Yes).	0
Format name. . . . . (1=Yes).	0
Name in 1st line . . . . . . (1=Yes).	1
Name in 2nd line . . . . . . (1=Yes).	0
Validate address . . . . (1,2 or 3).	3

| "WEB API" | Determines which API is used for address splitting and validation. |

1	Google API
2	Yahoo
3	Oiorest (only Danish addresses)
4	Opsmap (open street view)
5	Microsoft Bing (it requires a KEY, which is free)

"Remove blank lines…" The address API is called with five lines. If any of these may be blank, and you want them removed, you set this to "1".

"Create line at comma…" Allows you to split lines by using commas, thus controlling the formatting more precisely (may be relevant in case of highly complicated addresses, e.g. Chinese addresses).

For example "10 Downing Street, London" will be treated as two separate lines.

"Format name..." It only makes sense to split the name into first name, middle name, last name etc. in case of private individuals. In case of a company name, the parameter can be left blank.

"Name in 1st line..." Only relevant, if the name is NOT formatted. If the parameter is set to "1", Name line 1 will be moved to NAME.

"Name in 2nd line... Only relevant, if the name is NOT formatted. If the parameter is set to "1", Name line 2 will be moved to NAME.

If the parameter is set for both lines 1 and 2, they will be combined and moved to NAME.

"Close top address lines…" Possibility of blocking entry in the top half of the screen for editing addresses (displayed in case of errors in the address).

"Close bottom address lines…" Possibility of blocking entry in the bottom half of the screen for editing addresses (displayed in case of errors in the address).

"Validate address..." 1 = Both street name and number (of the formatted address) MUST be found in the original entry.

2 = Either the street name or both the postal code and the city (of the formatted address) must be found in the original entry.

3 = Street name and number as well as postal code and city (of the formatted address) MUST be found in the original entry.

A system parameter, Use of address formatting (ADRSPLIT), has been created for specifying whether to split the address for the individual applications.

Select the areas that you want to include in address splitting.

A check box has been added in the system parameter "Delivery methods for sales & purchase orders" (LEVMAADE), which makes it possible to specify that you do not want an address split check for the individual delivery method. For example, this can be useful in situations when your own cars perform the delivery, and the addresses are somewhat "unauthorised". By default, this option is not selected, i.e. a check is performed if the functionality has been set up to work with "Quotations and sales orders".

11.2.3 Conversion of existing addresses

It will be possible to convert existing addresses before you apply the new address concept.

In ASPECT4 we have conversion applications for the following functions:

- Customers (2111)
- Customers (6128) – come from the conversion of Customers (2111)
- Delivery addresses for customers (6129)
- Suppliers (3111)
- Suppliers (7128) – come from the conversion of Suppliers (3111)
- Receiving addresses (7129).

You have to make arrangements with a consultant if you want to perform a conversion – and specify which data should be converted. Erroneous addresses are not accepted. The logging parameter has to be activat-

ed, which makes it possible to go through the log afterwards, and correct any errors manually in the relevant application.
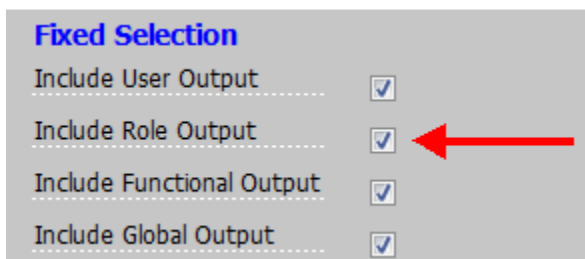
By default, the split of address information will take place from the date when the functionality is implemented, which means that there will be no conversion of orders or freight dockets.

11.3   Share virtual output on user groups

Many customers have a workflow where virtual outputs for follow-up purposes are generated by a job robot, which means that a number of identical runs are often performed in order to make them available for more users.
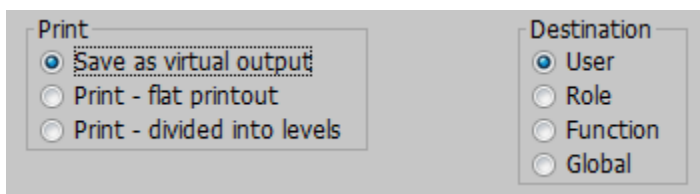
The purpose of this function is to avoid performing more runs than necessary and at the same time avoid having to maintain several setups of the same report. This is the reason why you can create virtual output on group level.

Virtual output (9171) has been expanded for the selection with role output:

You can include the following information when printing for virtual output:

The field is added on OPSTART FORMAT *ST1/*ST9 and can be copied from here to the relevant applications.

Print sales statistics (6485) and the warehouse prints (9401-9405) have been changed to include the "RADIO" version of the field by default.
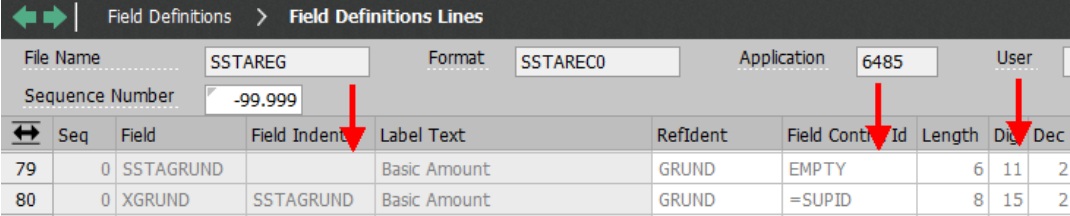
11.4   Large figures in reports

When printing e.g. values of stockholding in currencies with a low exchange rate or sales statistics, it has been a problem that the largest data types for amounts that could be handled in ASPECT4 Logistics had only 9 digits in front of the comma. This meant that figures over 1 billion could not be displayed, even though such figures might exist, especially in totals.

The purpose of this item is to be able to display and handle reports with amount above 1 billion correctly.

In programs for creating and handling virtual outputs, you can handle new free field types that only consist of a description of the number of digits and the number of decimals.

In cases when you want to be able to handle larger figures than what can be saved in the underlying data-base fields, you add a new calculated field (X field) with more digits (e.g. XGRUND in the example below). The field is given the same name as the original field (SSTAGRUND), but the first 4 characters are replaced by an X, and the field type is specified as X. As the supplementary field ident, you specify the original field name (SSTAGRUND). A new field control ident (=SUPID) has been introduced, which is applied to the new field.

In situations when the field is already a calculated field, you can only change the number of digits.

The new facility is implemented in Print sales statistics (6485), where the following fields are replaced by new calculated fields as outlined above:

- Basic amount (SSTAGRUND)
- Gross amount (SSTABRUTTO)
- Cost amount (SSTAKOST).

11.5   Reverse VAT in connection with sales and purchase of specific items

This item is related to the handling of "Reverse charge", which is a new VAT rule which has been in effect since 1st of July 2014.

For our current ASPECT4 Logistics customers, trade with the affected items is not their primary business. However, all of our current customers buy several of the affected items.

They can choose to handle this VAT requirement using:

- Manual handling
- ASPECT4 Financial Management
- ASPECT4 Logistics and Financial Management, if the sales transaction is performed using orders.

Affected items

As mentioned, the rules concerning Reverse charge have to be applied from now on when two EU companies have a sales transaction where the following items are involved:

- Mobile phones
- Integrated circuit devices
- Gaming consoles
- Tablets
- Portable computers
- Metal scrap (old rule).

ASPECT4 Logistics customers who sell the affected items using sales invoices and/or purchase the affected items using purchase orders in ASPECT4 Logistics, will be affected by the new rules as seen from the point of view of ASPECT4 Logistics.

The consequences of the new VAT rules are:

Sales:
- You do not have to charge VAT for the sale.
- On the invoice, it has to say: "Reverse charge – buyer pays VAT".

Purchase:
- The voucher totals exclude VAT for the affected items.
- Incoming VAT has to be extracted and posted on the associated account.
- The offset account for calculated VAT is the account for "Reverse charge".

If you want incoming VAT to be posted differently in this special situation compared to regular incoming VAT, you handle this using a pseudo account setup, e.g. for the item VAT group.

11.5.1   Functionality – Sales

You do not have to charge VAT for the sale:

Handled by associating the item number with a sales item VAT group that has been created with a VAT rate of 0 (zero). In addition, the VAT group is marked for Reverse charge.

On the invoice, it has to say: "Reverse charge – buyer pays VAT"

Handled by associating a text block with the above-mentioned VAT rate (9183), which will be printed on the invoice.

A new item VAT group is created. The new VAT group is marked for Reverse charge.

All System Parameters > VAT Groups (MOMSGRP) > Edit

Vat Group KS Purchase VAT sales 0%

▼ **1. Identification**

Identification

Group Name (danish)   Købsmoms salg 0%

Reversed charge   ☑ ←

A text block is created in Text blocks (9161), in which the text for Reverse charge is specified.

Text Blocks > Edit

Number OMVMOMS   Language 02 English

▼ **1. Identification**   **2. Change Log**

Identification

Description (danish)   Reversed charge

Text Type   FAKTURA   test

Text   Reversed charge – buyer pays VAT.

Text Length   35

Line Length   60 ▼

A new combination of the new item VAT group with the customer VAT group is created. This is done in VAT rates (9183). The VAT rate is here specified as 0 (zero). It refers to the text block created in Text blocks (9161). This ensures that the text will be added correctly to the invoice.

VAT Rates > Edit

Item Vat Group KS Purchase VAT sales 0%   Customer/Supplier VAT Group 01 Momsgruppe 01   From Date   01-01-14

Identification

To Date   31-12-29

Description (danish)   Omvendt momspligt

VAT Rate   0,00   0 - 999,99

VAT Group to Finance   00   0 - 99

Text Block Number   OMVMOMS   Reversed VAT

11.5.2   *Functionality – Purchase*

The VAT rate (9183) for affected purchases is defined by the standard VAT rate with a new item VAT group marked for Reverse charge just as it is done for sales.

Posting of Incoming VAT and Reverse charge:

Debiting:
Posting of Incoming VAT (IM) is done in the usual way.

Crediting:
A new pseudo account type is created for this purpose: Incoming VAT, Reverse charge (IR). This transaction settles the Incoming VAT(IM) transaction.

Applications that calculate and present voucher totals have been changed, so voucher totals now exclude VAT amounts belonging to a VAT group marked for Reverse charge.

These specific functions include:

- Purchase order (7232)
- Reminder (7233)
- Receipts registration (7166)
- Order totals (7102)
- Setup of pseudo account type IR.

Description of posting for IR

Pseudo account type	IR
Basic account plan	Balance sheet account
General description	Debiting on "Account for incoming VAT, Reverse charge".
Quantity	0
Amount	Net line amount excluding the distributed total discount multiplied by the current VAT rate for invoice registration. VAT rates per item VAT group (possibly per item/warehouse area information) or supplier VAT group are defined using the application "Work with VAT rates" (9183). Posting on this account only happens in case of Reverse charge, which is defined by the item VAT group (MOMSGRP).

11.5.3 Summary of what has to be done

- Item VAT groups are defined (MOMSGRP).
  Please note that it can be necessary to use one for sales and one for purchase depending on whether the same VAT group is used for suppliers and customers.

- A Text block (9161) is created with the text "Reverse charge – buyer pays VAT".

- VAT rate – Incoming (9183) is defined for domestic purchase of the affected items, i.e. by specifying the domestic VAT rate.

- VAT rate – Outgoing (9183) is defined for domestic sales of the affected items, i.e. by specifying 0 (zero) as the VAT rate and the above-mentioned text block.

- Pseudo posting for Reverse charge (IR) is defined and created.

- Pseudo posting for Incoming VAT (IM) is adjusted if the posting should differ from standard posting.

11.5.4   Implementation

You have to ensure that no activities (sales or purchase) exist that have to be posted according to the old rules at the point in time when you set up the VAT groups and VAT rates.

11.6   Access control on forwarding of application calls

This enables you to control who can do what in the individual applications.

Previously, you often had to create copies of applications with limitations to the individual user's options.

You can now use the system parameter "Application-dependent shortcuts" (SHORTAPP) to overrule the existing options.

For numeric options, a new control parameter is added to Application-dependent shortcuts (SHORTAPP). It is used to specify if you only want to perform authority check or to overrule the execution of the option completely. In the first case, the authority check is only used for determining if the option in question should be displayed or not, whereas in the second case, it is the entire call, which will then be made the same way as for the alphanumeric shortcuts.

If you only want to perform the authority check, you should still specify the application number to use for the authority check.

When this has been turned on, you can control internal options by adding a dummy application on Application-dependent shortcuts (SHORTAPP) and only use the authorisation for this. An internal option is not a call of a subordinate application, but an option that is typically executed by the V program (option 01-05 etc.).

In addition, we enable the possibility of creating internal options through Application-dependent shortcuts (SHORTAPP). This feature has been requested for a long time, especially for use in C development. As it is now, a new internal option requires that you make changes in the L program in a number of places and create a C version of the MESS record – with the risk of making errors that this involves. A new parameter has been created to specify that something is an internal option. An internal option will always just call the V program, which is then the only thing for which you have to create a C version. You can still specify an application for an internal option, but just as above, it will only be used for a possible authority check.

In situations when you want an authority check, you create the option in question under the system parameter "Application-dependent shortcuts" (SHORTAPP) and specify that only authority check should be used.
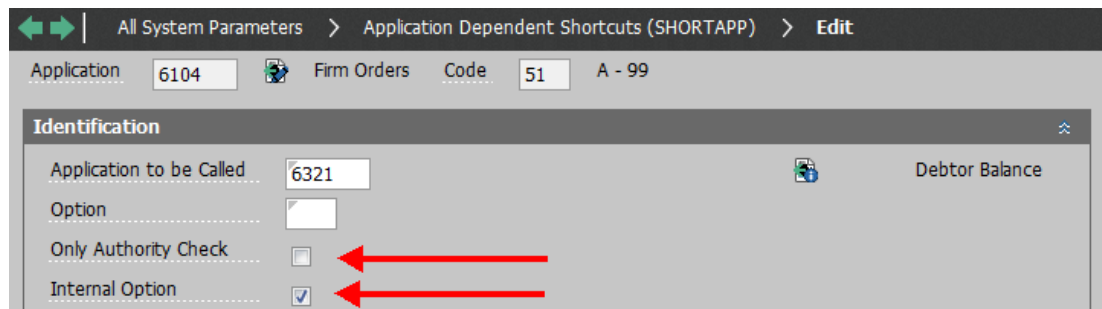
11.7 Virtual Output

Virtual Output has been modernised. Usage has been simplified, and you no longer have to specify paths – which used to be a challenge in some situations.

This means that the transfer from Virtual Output to a spreadsheet is changed, so you now write directly in a stream file on the IFS.

The new stream file is defined to be in UTF-8 format, which means that it can include Unicode characters.

The function "Create file" can also create Unicode fields.

The folder "416.Virtuelt_Output" is created under \Aspect4. It is used for text files going forward.

The naming of the files is made unique by using the format <time stamp>_<user>_<app>.csv, for which time stamp is found using ZGETTS. User and app are retrieved from the virtual output.

Semicolon (;) is used as separator in the file.

If you want to create a spreadsheet, fill in the following:
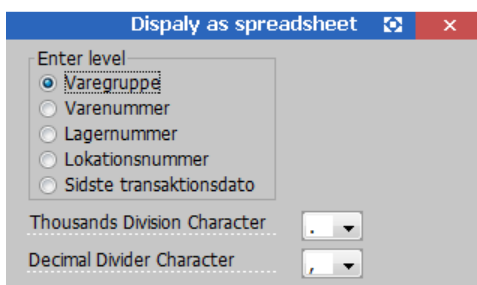
The upper part depends on the structure of the virtual output.

Thousands and decimal separators still have to be specified, since we cannot read the computer setup.

11.7.1　Implementation guidelines

The folder "416.Virtuelt_Output" is created under \Aspect4. The folder has to be created manually. If you work in an VAP environment, the folder has to be created under ASPECT4/<pppp>, where <pppp> corresponds to the VAP ident.

You have to make sure that users have access to this folder.

11.8　Field control idents

11.8.1　Copying of field control idents between environments

You can now copy field control idents between environments.

11.8.2　Day of the week/month etc. using field control idents

In cooperation with Hedegaard & Christensen, we have developed a new field control ident which can show the day of the week/name of the month. Names of days and months are retrieved from a new system parameter, Nicknames – Weekdays/months to ZCPDATE (KALNAVN), which can be language-controlled.

11.8.3　Show a specific supplementary text using field control idents

In cooperation with Dokka Fasteners, we have developed a new field control ident which can show supplementary texts with a specific text type.

11.8.4　Currency conversion using field control idents

In cooperation with Dokka Fasteners, we have developed a new field control ident which can perform currency conversion. The new field control ident "VALUOMR" can be added to any STFE price/amount field by copying the original field and specifying the currency that you want to convert to, in the supplementary field ident, e.g. "EUR" with today's date.

The field control ident converts from the system currency to the specified currency and adds the trailing text to the field.

11.8.5　SQL integration

We have developed a new standard function for field control idents that can execute any SQL SELECT statement.

The syntax is: SQL(<file name>,<column>,<where expression>).

The function can be applied very generally to find and build a value.

The following SQL is executed:

SELECT <column> FROM <file name> WHERE <where expression> FETCH FIRST ROW ONLY

The expression can be very simple or more complex.

<column> can be one field or can contain SQL functions. For example, "MAX(<field name>) - MIN(<field name>)".

Similarly, <file name> can also be more than one file. For example, "xxxxTBL INNER JOIN yyyyTBL ON xxxxn1=yyyyn1 AND xxxxn2=yyyyn2".

It is a requirement that the expression results in exactly one value. If the result is several rows, the value of the first row will be used.

11.9   Field overrides – Copying between environments

You can now copy a setup in Field overrides (9160) to another environment, and it is also possible to update user space from the application.

In addition, the change and creation log as well as the time stamp (TS) are updated on the new records that are created when copying.

If overwrite is set to yes when copying, the user space will not be given a new name since overrides may be pointing to it.

When deleting Field overrides (9160) (and Field definitions (9169)), a check is made in order to prevent you from deleting a cross reference between STFEREG and User spaces (STFR) if this is used as the basis of another cross reference between STFEREG and User spaces (STFR).

When copying between environments, it is now possible to copy only Field definitions (STFEs) and only Field overrides (STFOs), and at the same time keep the existing Field overrides (STFOs) and Field definitions (STFEs), respectively.

11.10   Days of the week have been added to company calendar and route calendar

Days of the week are now displayed in Company calendar (9175) and Route calendar (9174). In addition, weekends are now marked with a colour.

11.11   DocManager – Limit documents in CrossWork

In cooperation with Scantruck, we have developed functionality that makes it possible to override the document name for DocManager based on information from the system parameter "Sales order group".

The purpose of this new functionality is to enable selection of specific order groups that should result in quotations, order confirmations, delivery notes and invoices for display in CrossWork.

The main idea is that the documents on order groups that should be displayed in CrossWork, are printed as a specific document type, and that the ones that should not be displayed, are printed as another document type. This can also be used for authority check of who are allowed to see which documents in MultiArchive.

On the system parameter "Sales order group" (SOART), the field "Overridden form name" has been added. Here you can specify a value for the order types where the document e.g. should not end in CrossWork or should require another authority.

Document print reads this information for each order to be printed, and if the new field has been filled in, the value will be added as a prefix along with the document name (e.g. EJFAKTURA) to a DocManager input called "Overridden form name". If the field is blank, the "standard" form name is used (FAKTURA).

11.12 Lists – Show only primary columns

You now have a "Primary columns" button that can be used for changing back from "All columns".

11.13 Supplementary texts in QueryManager

In cooperation with C.C. Jensen, we have developed User Defined Functions (UDF) and User Defined Table Functions (UDTF) as well as views for the different files that contain supplementary texts. A UDF returns exactly one value, whereas a UDTF returns a table with rows and columns.

The developed views will contain a text field which is a collection of text lines for a field.

The views can be used from Query.

The following tables are supported:

File name	Title
ORDTREG	Order texts for sales and purchase orders
PRMTREG	Texts for production models
PROTREG	Production order texts
TEXTREG	Texts for master data

A set of UDFs are developed which have a usage code and a key for the text as their input. The key here corresponds to the record that the text belongs to, e.g. an order line key. These UDFs return the text as a combined string corresponding to the text that will be written to a document that matches the usage code. If the usage code is 0 (zero), all texts are returned.

A set of UDTFs are developed which have the key as their input. They return a table with the text type and matching texts.

When both the UDFs and the UDTFs are created, line breaks in the texts are replaced by 2 spaces.

The following views will be developed, which use the UDFs and UDTFs:

Name	Title
ORDH01VIWI	Supplementary purchase texts for the header per text type
ORDH01VIWS	Supplementary sales texts for the header per text type
ORDH02VIWI	Supplementary purchase order texts per order
ORDH02VIWS	Supplementary sales order texts per order
ORDL01VIWI	Supplementary purchase texts per order line per text type
ORDL01VIWS	Supplementary sales texts per order line per text type
ORDL02VIWI	Supplementary purchase texts per order line
ORDL02VIWS	Supplementary sales texts per order line
ORDT01VIW	Supplementary order texts per text type
ORDT02VIW	Supplementary order texts
PRMT01VIW	Supplementary model texts per text type
PRMT02VIW	Supplementary model texts
PROT01VIW	Supplementary order texts per text type
PROT02VIW	Supplementary order texts
TEXT01VIW	Supplementary texts per type, text type and language
TEXT02VIW	Supplementary texts per type
VARB01VIW	Supplementary texts per item per text type
VARB02VIW	Supplementary texts per item

These views can be used directly in Queries and SQL.

Generally, these views only contain the record key and the text fields. Consequently, they are typically used as joins from the tables themselves.

The applications "File definitions" (9164) and "Files" (9165) are expanded to be able to build and handle UDFs and UDTFs.

These appear in the file group User Defined Functions (*UDF).

11.14 Description of method for individual table extensions

We have created a best practice for handling database extensions. This means that they can be made more safely and without risk.

Individual fields are named with a numeric value in position 5. This way we ensure that a new standard field with the same name will not be introduced later. Example of an allowed, individual field name: VARB1BELQB.

12 ASPECT4 Activity Streams

12.1 Activity Streams in ASPECT4 Logistics

When Release 4 came in 2013, ASPECT4 Activity Streams was one of the new features.

ASPECT4 Activity Streams gave the company new possibilities for staying up-to-date with selected events and news that are either created manually by colleagues or automatically by ASPECT4.

We have chosen to include a few standard Activity Streams in this release.

This is, however, one of the areas for which each company has their own needs, and it can be very different what adds value for each company. This is why we have chosen to include one post which has been created from a query, and one which has been created from triggering.

These standard posts should mainly be regarded as inspiration for creating the posts that add value in your company.

If a customer that did not purchase anything for the last 5 years suddenly submits an order, you will see a post both on the customer and on the new system post type called "Old customer has submitted an order".
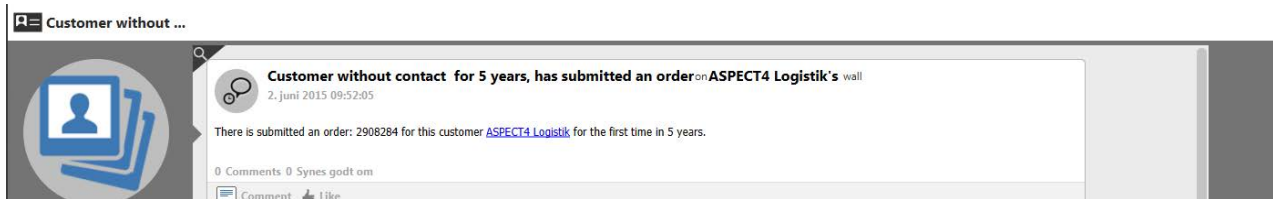
A post will be added when an item changes its status from "not" 30 to 30. This is only for a change situation.

12.2 Implementation

If you want to use the trigger-based creation of Activity Streams, you have to set up triggers in ASPECT4 Business Integrator (0060) to enable the creation of posts.

If you want to use the query-based creation of Activity Streams, you have to set it up in the job schedule system to enable the creation of posts.

13 ASPECT4 Infoboards

One of the common areas included in ASPECT4 Release 5, is Infoboards. Infoboards is a possibility for distributing knowledge in relevant places. Infoboards is a flexible, electronic and dynamic info board which is divided into tiles that are rapidly updated. The system can be adjusted to any needs, and the individual elements can be added in a very simple way.

To help you get started in ASPECT4 Logistics, we have included the following infoboards in Release 5.

13.1.1 General infoboard – for setup on the workspace

When you are in the workspace, you can set up an infoboard. This infoboard does not need to have any keys attached since it is general for the active company.

This infoboard contains the following elements:

- A figure for the current sales order backlog for the company.
- A figure for the current stock value for the company.
- A figure for the work in progress for the company.
- A figure for the current purchase order backlog for the company.

- An overview of the company order intake and sales in the last 12 months for all customers. This is displayed as a graph with two figures per month.
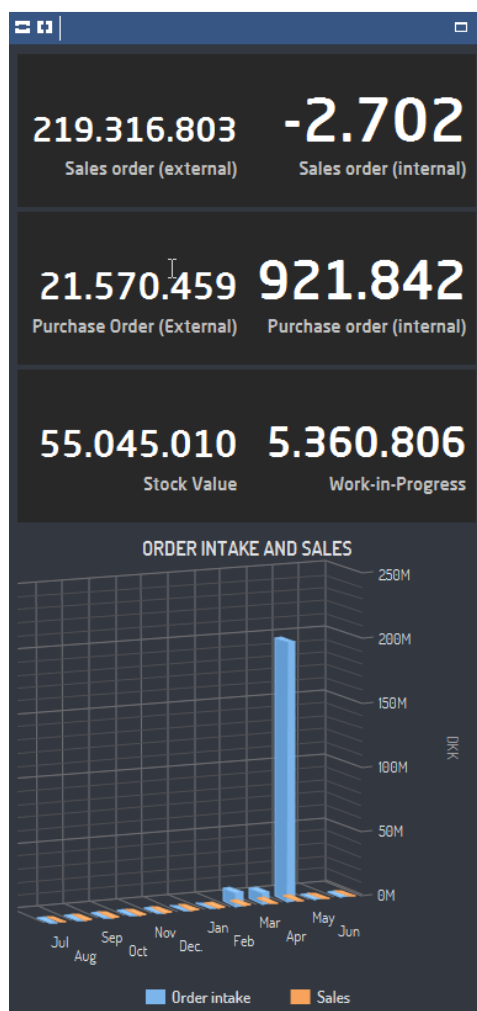
The infoboard is added to the workspace by using the plugin 0X28.

13.1.2   Customer infoboard

When you are in a place where you have a customer number in Stepping Stone, we can show a Customer infoboard.

You can call it from both a desktop, a tablet and a smartphone.

This infoboard contains the following elements:

- Customer information (name etc.).
- A visual display of how large a part of the customer's credit maximum is used.

- A figure for the current order backlog for the customer.

- An overview of the customer order intake and sales in the last 12 months. This is displayed as a graph with two figures per month.
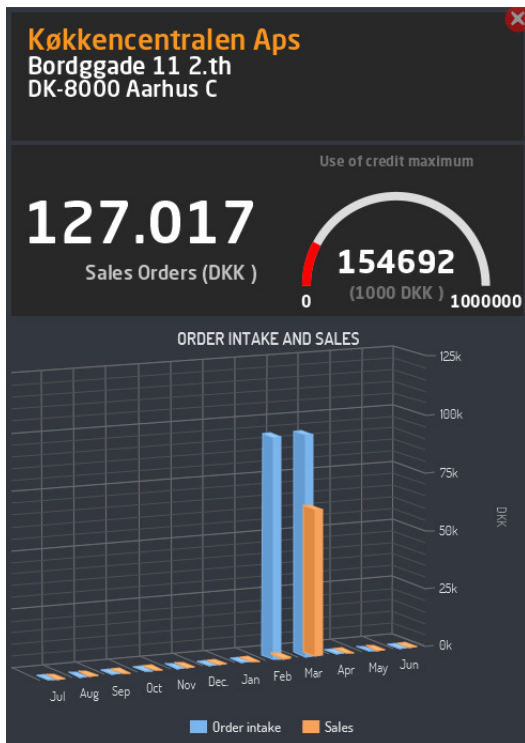
14 ASPECT4 Insight Search

One of the common areas included in ASPECT4 Release 5, is ASPECT4 Insight Search.

Here we have developed the following searches for this release:

- Product search
- Customer search
- Search for the customer's order number.
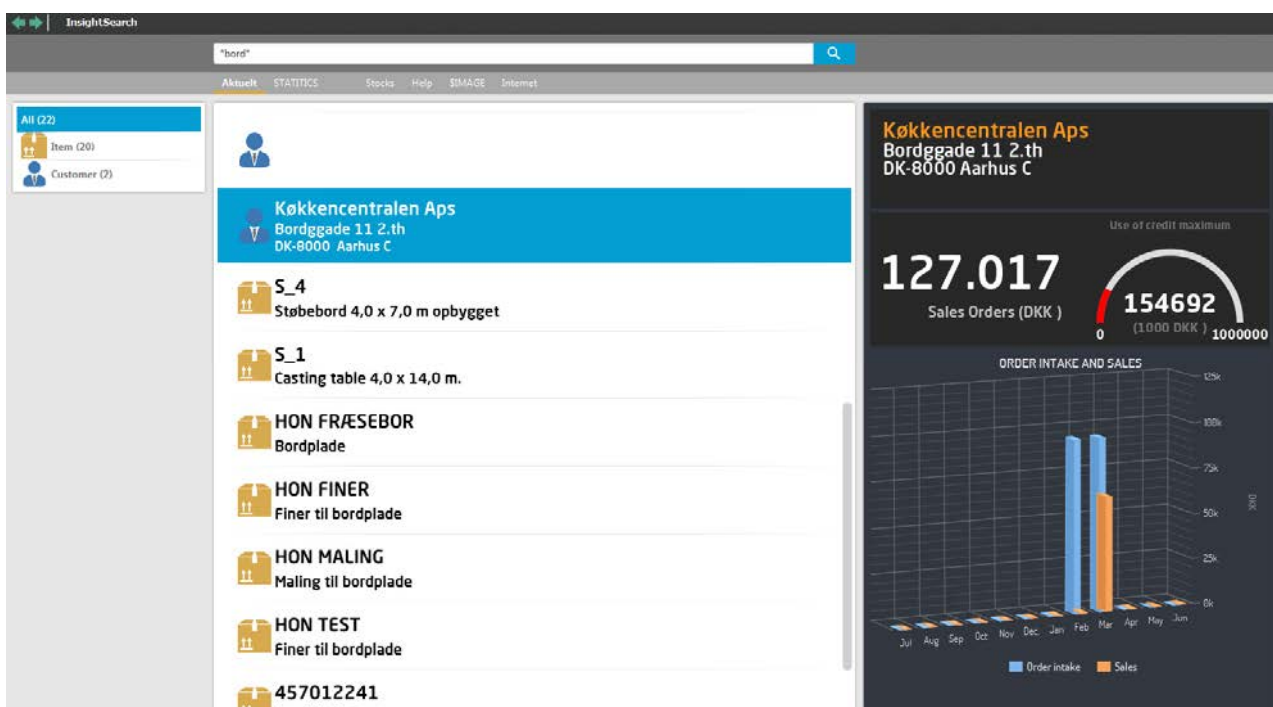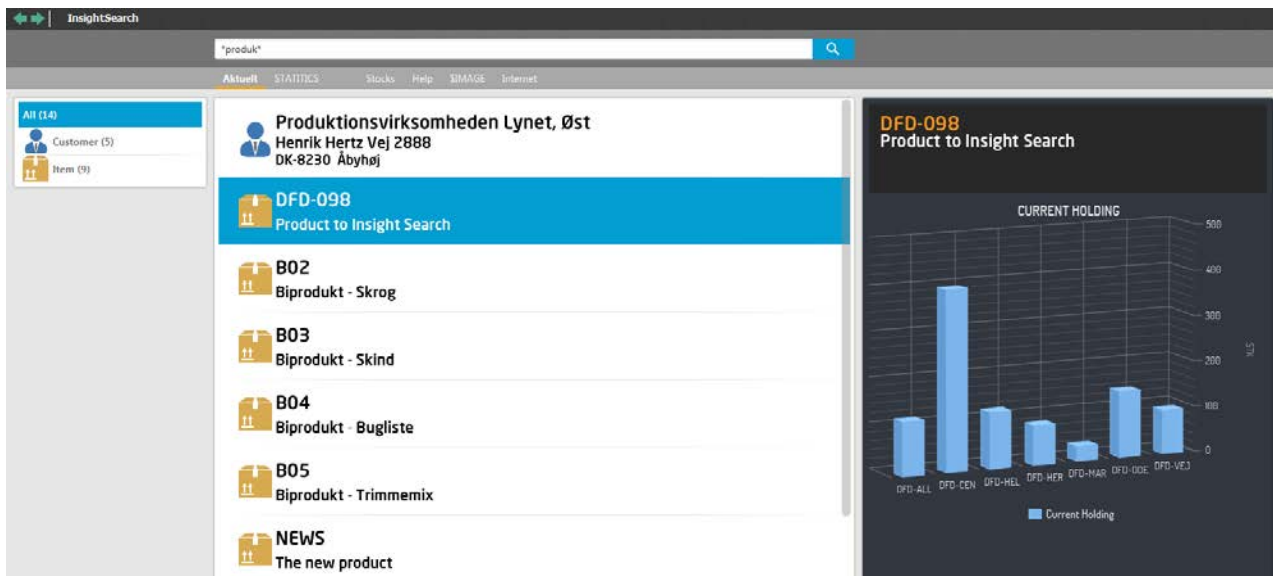
Here you can create the searches that are relevant for the individual company. The searches mentioned here are partly meant as the general searches that most companies can use as they are – and partly as inspiration for creating the perfect searches for specific needs.

1   Introduction to Release 5 of ASPECT4 Financial Management

ASPECT4 Release 5 continues where Release 4 left off - not only in terms of the sequential number, but also its contents. The predominant themes of ASPECT4 Release 4 were mobility and the simplicity that characterizes mobile apps on smartphones and tablets. Release 4 was also the ASPECT4 release with the fastest penetration of the market ever. The dialogue with our ASPECT4 customers has taught us that customers and users highly appreciate simplicity and to be able to bring their consumer habits with them into their professional activity, so to speak.

One of these consumer habits is the option of using their preferred search engine for global information. Google searches have even given their name to a new verb when we "google" in order to find what we are looking for. We are inspired by this in an ASPECT4 context, and we have noted that as consumers, we prefer search engines that deliver simplicity, speed and accuracy. With ASPECT4 Insight Search, ASPECT4 Release 5 offers the same experience and efficiency – and some additional features.

Generally, Release 5 is introduced under the theme of ASPECT4 Insight, and in addition to its strong and efficient search, ASPECT4 Insight also offers other types of insight and overview. One of the important new developments is ASPECT4 Insight Infoboards – or in brief: Infoboards. Infoboards are a new concept for providing a fast and relevant overview presenting essential and relevant information about ASPECT4 business objects – in relation to the use context. These overviews, i.e. infoboards, are a further development of the Stepping Stone concept which was introduced in ASPECT4 release 3.

In addition to ASPECT4 Insight, a number of major and minor extensions and developments of ASPECT4 have been made, e.g. for the ASPECT4 Client, the EG CrossPad mobility platform and the ASPECT4 QueryManager reporting tool. Here you find a number of new developments in direct continuation of the theme – all with the purpose of giving users better overview and insight as the basis for faster and better business decisions and process support in the daily work.

ASPECT4 Financial Management Release 5 contains a number of improvements and extensions to support the modern user of ERP functionality and information. These improvements and additions cover both traditional applications and apps for tablets and mobile phones.

ASPECT4 Financial Management Release 5 offers Insight Search, Infoboards, automation of data collection, improved integration to the surrounding world, functionality for process optimisation, modernisation of known applications and apps and a lot of new functionality.

2   News in ASPECT4 Financial Management Release 5

2.1   ASPECT4 Insight Infoboards

ASPECT4 Financial Management introduces Infoboards – a new concept for providing a fast and relevant overview presenting essential and relevant information about ASPECT4 business objects – in relation to the use context.

These boards give you a fast overview of relevant information about the individual customer and vendor. Through an individual setup, you can display relevant information extracted from ASPECT4 Financial Management in combination with relevant information from the other ASPECT4 modules that are used.

For example, you can display a mix of information from ASPECT4 Financial Management and ASPECT4 Logistics.

Here you have an example of an infoboard with purely financial information:
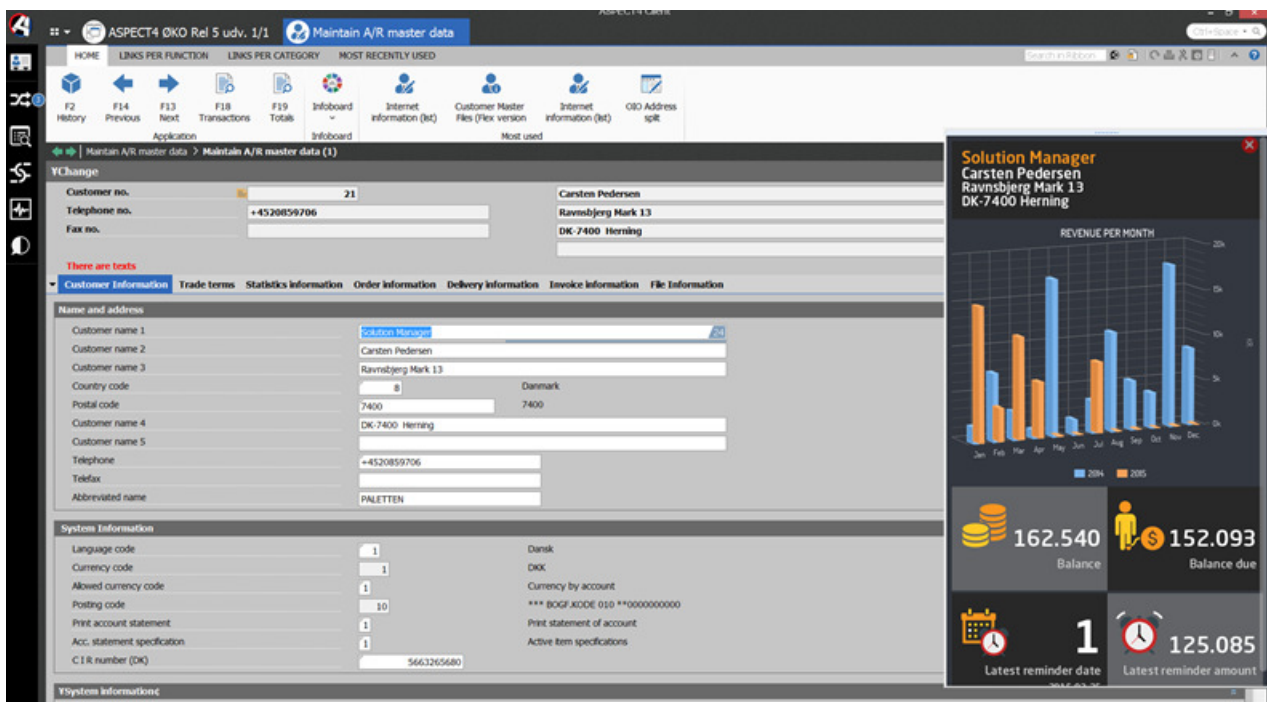
2.2   ASPECT4 Insight Search

One of the major new developments in Release 5 is the search functionality now available in ASPECT4, which is similar to what you know from Google. This functionality is called Insight Search, and using this tool, you can search across all business objects in ASPECT4.

This search will be available everywhere in ASPECT4. Using a keyboard shortcut, Ctrl+Space, you initiate the function called "Quick Search".

The search can also be used to start traditional applications. The experienced ASPECT4 user will soon realise that it is much easier to use Quick Search for starting new applications than the traditional keyboard shortcut, Alt+N.

Quick Search is displayed as a pop-up window divided into different sections that show the searches previously performed by the user. If the user wants to reuse one of the searches, they can do so by navigating through the previous searches using the arrow keys and pressing Enter to activate the selected search. At the top, the latest applications are displayed, and below these, the general searches performed by the user are displayed.

ASPECT4 Insight Search enables you to search in ASPECT4 in general for a specific value in the current company. For example, this search function makes it possible to search for a customer, and when the customer has been found, you can choose to see master data, transactions or other relevant information for the customer.

Insight Search is called using Ctrl+Space, and the search is initiated by entering a word or part of a word, using the arrow keys to navigate down to "Start search" on the next line, and pressing Enter. You can search for customers, orders, item, accounts, sales representatives, employees, help descriptions, etc.
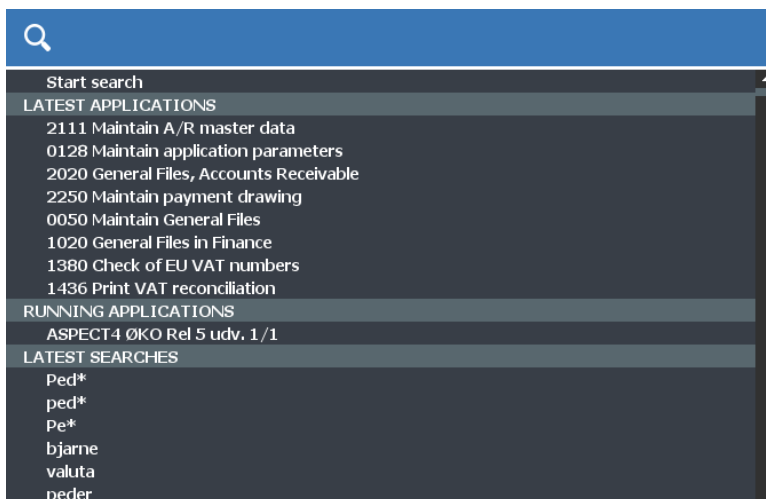
For more details about the search options, see the description for ASPECT4 Foundation.

2.3   Information databases

ASPECT4 Release 5 enables you to dynamically update information databases for customers and suppliers, so the totals in the database are always updated totals. Using a setting on the master data of the database, you specify if the information database should be updated dynamically or not:

A dynamic information database will be updated in connection with posting of transactions on customers and suppliers with movements. The database is updated again during the night for all customers/suppliers, since the calculation of maturity changes when moving to another date (this requires a setup in the job ro-bot).

An up-to-date database can be used for data analysis at all times. For example, for creation of a maturity list.

In addition, the database is used for display of infoboards, e.g. for inquiries on a customer or supplier.

We have created function descriptions with the headline "Get started with information databases". These descriptions contain information and inspiration for getting started with using the information collected in the databases.

- Finance – GLINFOBASE
- Accounts Receivable – ARINFOBASE
- Accounts Payable – APINFOBASE.

2.4 Automatic posts in Activity Streams

As a further development of Activity Streams, you can now add automatic posts on customer and supplier walls.

A post is typically added, when a given change/action is performed in ASPECT4. For example, this could be a change of the credit limit or status code for the customer or when a reminder is printed for the customer.

You set up per group/company which actions to post on the wall.

The individual user can sign up for automatic notification about posts on customers/suppliers:
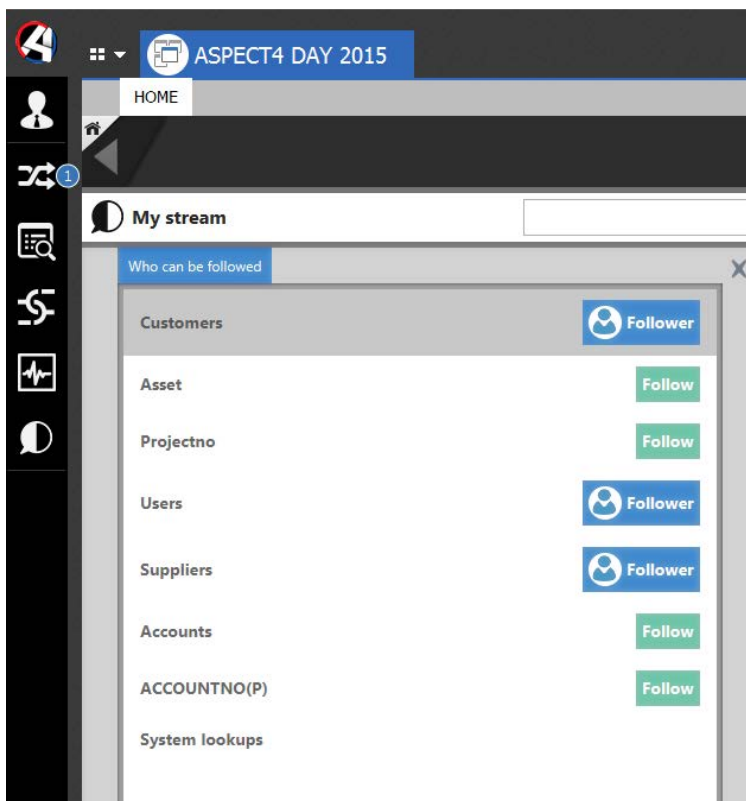
You choose which actions should be written on the customer wall:

And on the supplier wall:

This is an example of a post on a customer wall:
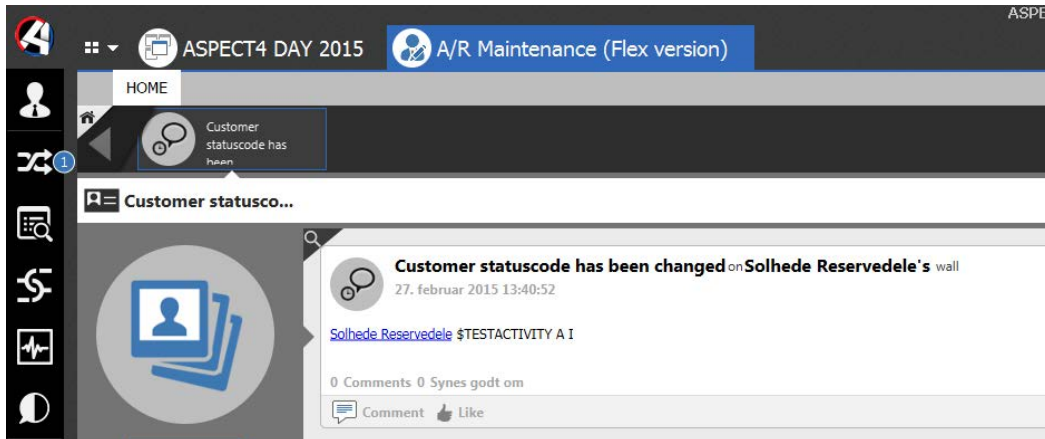
2.5   Departmental accounts (1M01) – using app

Departmental accounts for display on a tablet were included in ASPECT4 Release 4.

In ASPECT4 Release 5, a number of new developments have been made for this app:

- The result can be displayed using an alternative chart of accounts with the option of extraction to the entry chart of accounts.

- In the parameters for the app, you can now determine if zero accounts should be included in the display.

- Totals are displayed in the inquiry.

Example:

April 2015		BalanceYTD	Budget YTD	Index	Balance MD	Budget MD	Index		
10050	BRUTTOOMSÆTNING	-31.957.285	-25.075.800	127%	-9.959.447	-10.429.400	95%		
21000	VAREKØBSOMKOST…	15.401.448	9.898.800	156%	4.534.156	4.465.200	102%		
25000	LØNOMKOSTNINGER	446.130	296.700	150%	147.770	148.350	100%		
41000	LAGEROMKOSTNIN…	1.247.978	890.160	140%	446.184	457.580	98%		
43000	SALGSFREMMEN…	100.786	61.500	164%	27.086	27.750	98%		
45000	ADMINISTRATION	1.123.125	617.000	182%	310.396	303.000	102%		
51000	AFSKRIVNINGER	520.000	347.460	150%	174.000	173.730	100%		
61000	INDTÆGTER	-163.932	-109.000	150%	-53.554	-49.250	109%		
62000	UDGIFTER	412.481	238.000	173%	139.015	119.000	117%		
63000	EKSTRAORDINÆ…	2.324	15.000	15%	1.360	7.500	18%		
		-12.866.943	-12.820.180		-4.233.033	-4.776.540			

Operating statem. in DKK

2.6   Statement of income (1M04) – using app

A statement of income has been created for display using a tablet. The app displays the monthly balance, the monthly balance last year, year-to-date balance and year-to-date balance last year.

Individual settings can be made by function or user. This way, the app can display a statement of income on the basis of an individual setup. You can also limit the access of the individual user so that they can only inquire on e.g. specific accounts.

You can specify the totals on underlying account totals or accounts.
The app uses one or more financial totals models built on the account level(s) on which you want to inquire.

Up to 10 financial totals models may be used during the inquiry. This way, figures on a low account level may be unpacked, if necessary all the way down to the level of the account accepting entries.

Before you start using the app, you have to define the desired inquiries and build the needed financial totals models as required. On a general level or for the individual user, you have to specify which accounts can be included in the inquiry.

In the parameters for the app, you have to specify:
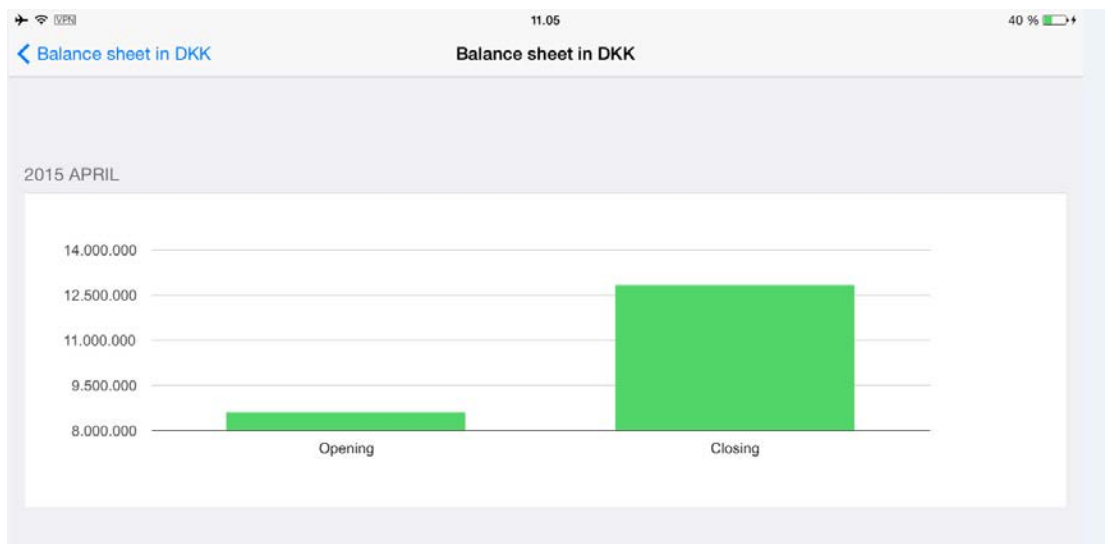
•   Should zero accounts be included?

For the individual function group/app user, you have to specify which totals models should be used in the inquiry.
The result can be displayed using an alternative chart of accounts with the option of extraction to the entry chart of accounts.

Example:

April 2015		Balance MD	Balance MD b. year	Year-to-date	B. year to date		
10050	BRUTTOOMSÆTNING	-9.959.447	-8.685.539	-31.957.285	-28.375.418		
21000	VAREKØBSOMKOST...	4.534.156	4.095.750	15.401.448	14.493.720		
25000	LØNOMKOSTNINGER	147.770	124.500	446.130	249.000		
41000	LAGEROMKOSTNIN...	446.184	440.725	1.247.978	1.545.796		
43000	SALGSFREMMEN...	27.086	29.920	100.786	67.920		
45000	ADMINISTRATION	310.396	303.315	1.123.125	1.162.600		
51000	AFSKRIVNINGER	174.000	169.630	520.000	514.730		
61000	INDTÆGTER	-53.554	-50.835	-163.932	-161.988		
62000	UDGIFTER	139.015	141.460	412.481	425.090		
63000	EKSTRAORDINÆ...	1.360	780	2.324	1.690		
71000	OMSÆTNINGSAKTIVER	9.552.564	8.827.642	46.635.498	42.454.904		
75000	ANLÆGSAKTIVER	320.700	308.300	5.909.437	5.450.135		
80500	EGENKAPITAL	0	0	-23.689.507	-13.328.981		
81000	KORTFRISTET GÆLD	-5.678.233	-2.413.988	-2.652.311	-11.299.767		
85000	LANGFRISTET GÆLD	-10.876	-3.285.160	-12.888.056	-12.711.300		
89000	HENSÆTTELSER	-170.470	-6.500	-733.928	-563.458		
96000	AFSTEMNINGER	219.349	0	280.942	75.327		
	Total	0	0	-4.868	0		

Graphic display of an individual account:

‹ Statement in DKK   BRUTTOOMSÆTNING
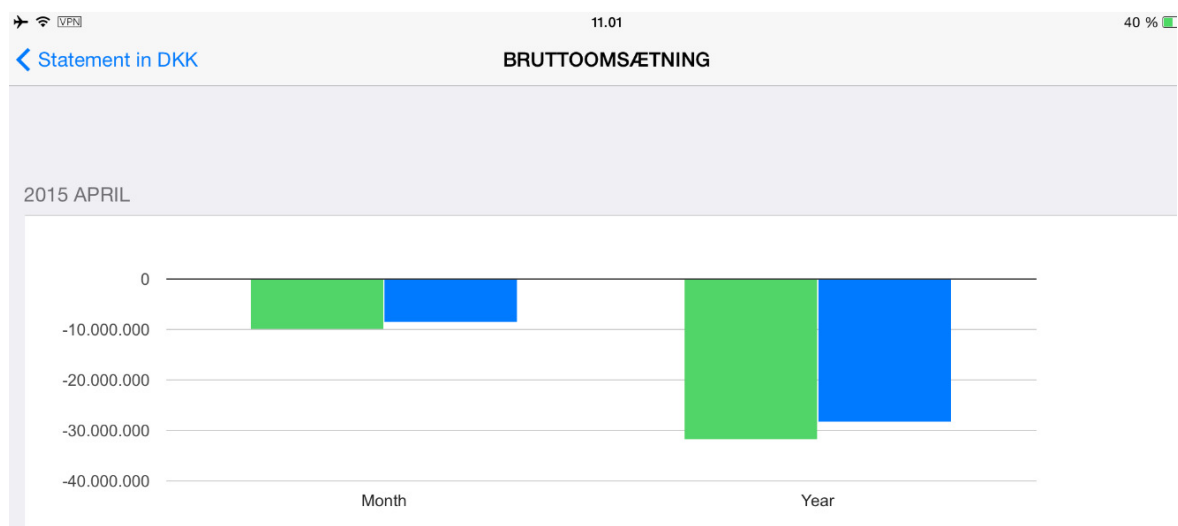
2.7   Balance sheet (1M03) – using app

A balance sheet has been created for display using a tablet. The app displays opening balance, monthly balance and closing balance for the selected period.

Individual settings can be made by function or user. This way, the app can display a balance sheet on the basis of individual needs. You can also limit the access of the individual user so that they can only inquire on e.g. specific accounts.

You can specify the totals on underlying account totals or accounts.
The app uses one or more financial totals models built on the account level(s) on which you want to inquire.

Up to 10 financial totals models may be used during the inquiry. This way, figures on a low account level may be unpacked, if necessary all the way down to the level of the account accepting entries.

Before you start using the app, you have to define the desired inquiries and build the needed financial totals models as required. On a general level or for the individual user, you have to specify which accounts can be included in the inquiry.

In the parameters for the app, you have to specify:

• Should zero accounts be included?

For the individual function group/app user, you have to specify which totals models should be used in the inquiry.

The result can be displayed using an alternative chart of accounts with the option of extraction to the entry chart of accounts.

Example:

Graphic display of the entire balance sheet:

2.8 Customer inquiry – using app

ASPECT4 Release 4 included an app for customer inquiry. In ASPECT4 Release 5, a number of new developments have been made for this app.

You can now call Activity Stream from the app with direct access to the customer wall. Here you can see both manual and automatic posts on the customer. In addition, you can write a post yourself or like a post.

When creating/maintaining a customer text using the app, you can start a workflow:

• Send an e-mail when receiving a telephone message
• Initiate a follow-up workflow.

In addition, you can create a meeting with automatic updates of your own calendar and send a meeting invitation to one or more other people.
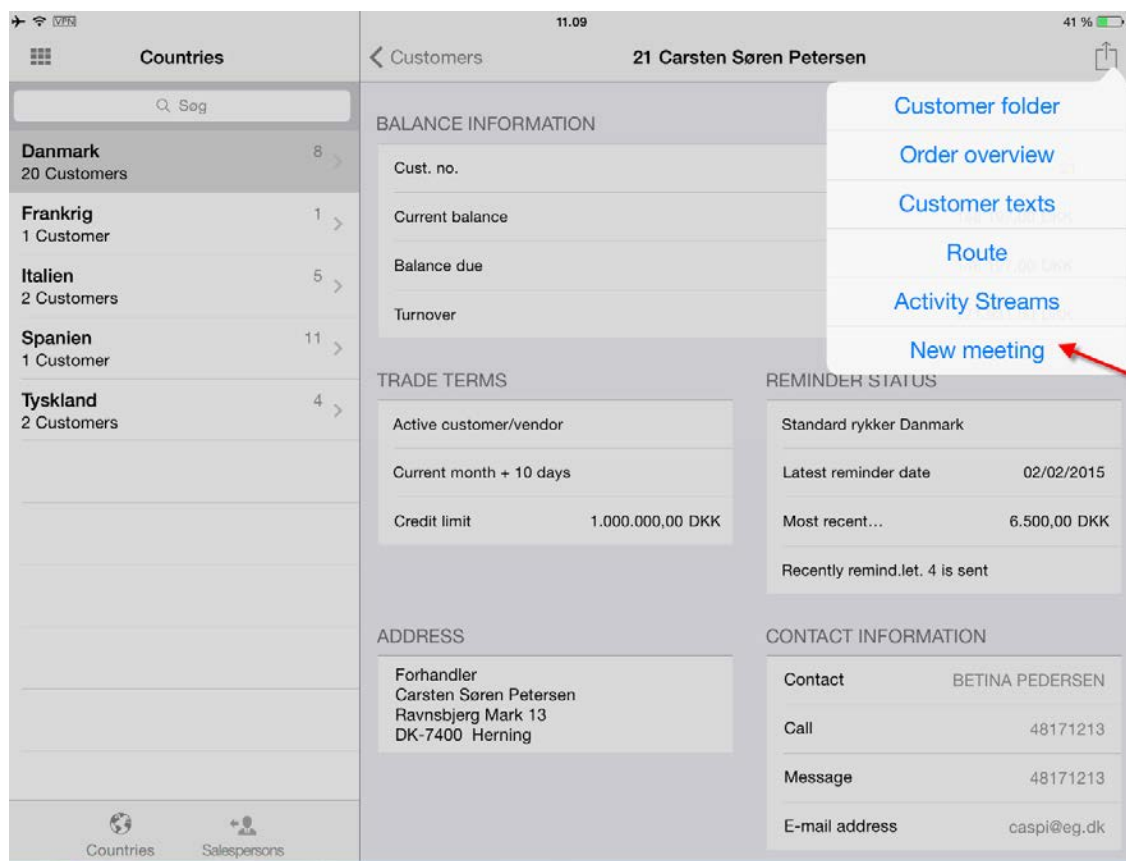
Using Stepping Stone technology, you can call this app for a specific customer from other apps, and you can call other apps for a specific customer.

2.9   Supplier inquiry – using app

ASPECT4 Release 4 included an app for supplier inquiry. In ASPECT4 Release 5, a number of new developments have been made for this app.

You can now call Activity Stream from the app with direct access to the supplier wall. Here you can see both manual and automatic posts on the supplier. In addition, you can write a post yourself or like a post.

When creating/maintaining a supplier text using the app, you can start a workflow:

- Send an e-mail when receiving a telephone message
- Initiate a follow-up workflow.

In addition, you can create a meeting with an automatic update of your own calendar and send a meeting invitation to one or more other people.
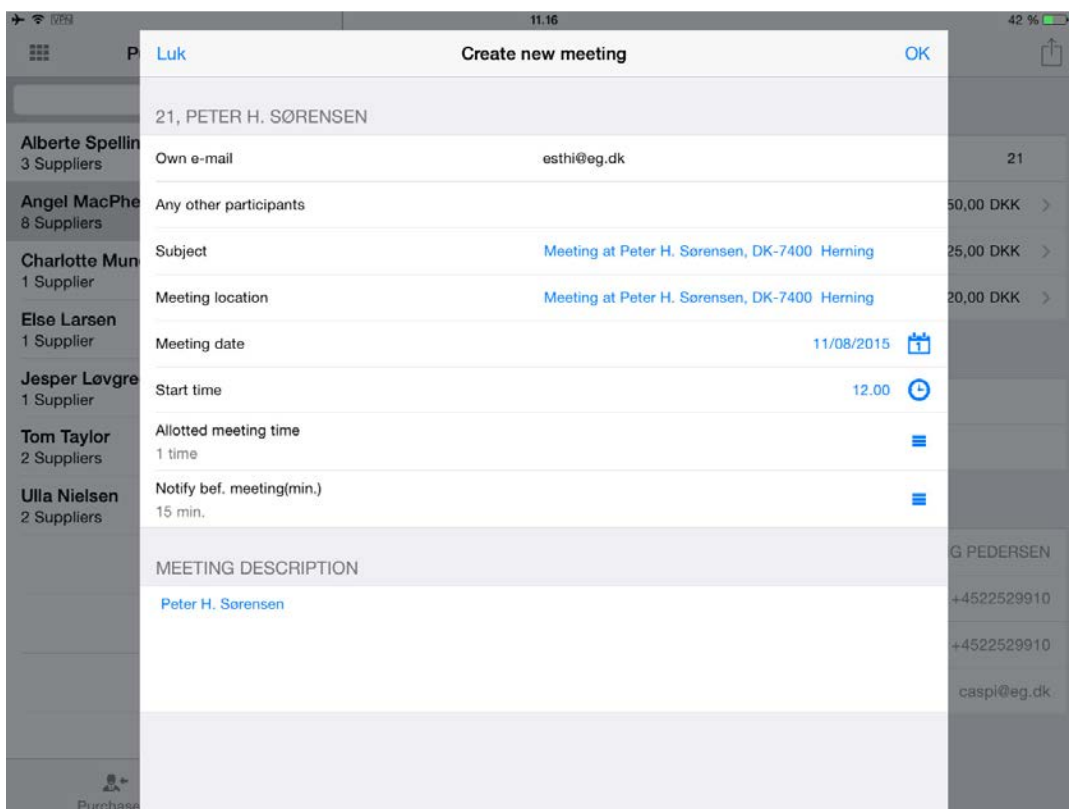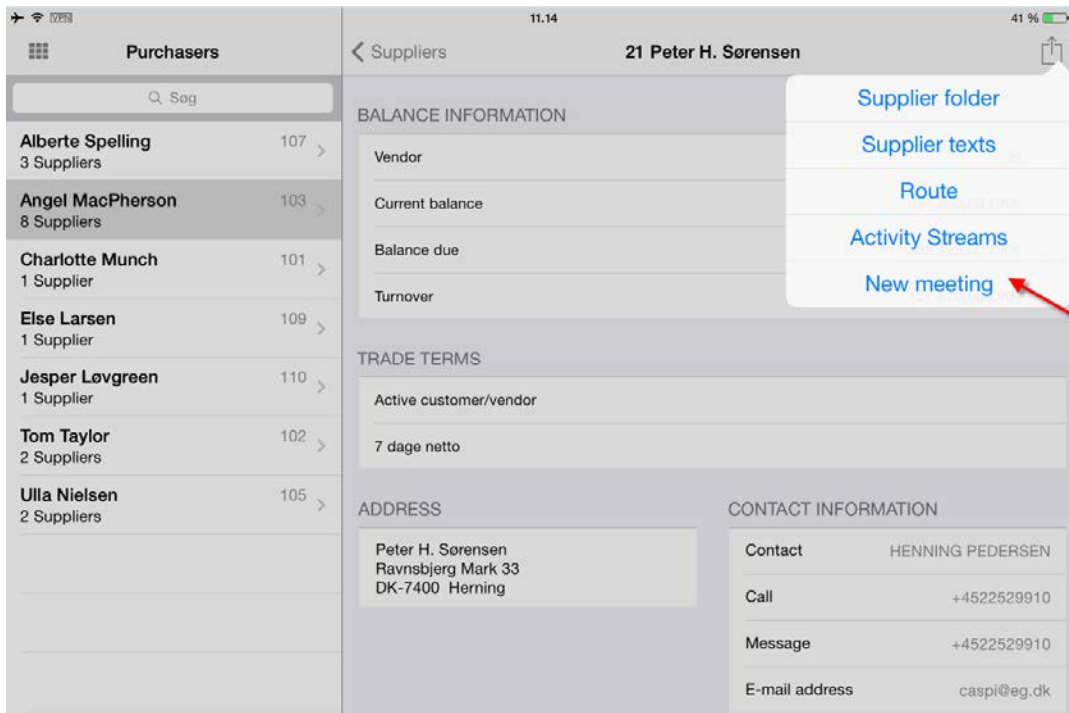
Using Stepping Stone technology, you can call this app for a specific supplier from other apps, and you can call other apps for a specific supplier.

2.10 Approval workflow for changing creditor bank information

When a creditor informs you that they have changed their bank information, this is implemented in the system by the A/P accountant. However, this type of change typically requires approval, e.g. from a financial manager, to be able to document that the change is correct, and that no fraud has taken place in connection with the specification of new bank information.

To optimise the entire approval process, we have created a new standard workflow in ASPECT4 Workflow Management.

The approval process starts when one or more of the following types of bank information are changed on the creditor master data:

- Bank registration number
- Bank account or IBAN
- Giro account
- FI creditor number.

When one of these types of information have been changed, you can decide if these changes should result in a reset of the payment form. If you do this, it will no longer be possible to make payments to this creditor. You set this up in General files section 3W01, "Approval workflow for creditor bank information".

The first task in the approval process is that the A/P accountant attaches documentation for the change in a predefined path on the IFS. The received documentation may, for example, be a received invoice, a received letter or an e-mail. The document has to be saved in PDF format. After this, the financial manager receives a task with a request for approval or rejection of the changed bank information. The task displays both the old and the new bank information for the creditor in question. It is also possible to see the attached documentation, if any was attached.

When the performed changes are approved or rejected, an update will automatically be entered in the history file, which makes it possible to see directly in the history file who made the change, and who approved or rejected it. The following fields are updated in the history file:

- Certified by user-id
- Certification date
- Note.

If the performed changes are rejected, the system sends a task back to the A/P accountant with a request for a correction of the creditor bank information. When the A/P accountant has corrected the information, the process is restarted, and the A/P accountant is asked to attach documentation.

If you have selected to reset the payment form code, the payment form code will be reinserted, but if the payment form code has been changed in the in-between period, the new payment form code will be inserted.

If you want to use this approval workflow, please contact your ASPECT4 Financial management consultant to request the required setup of your system.

Example:
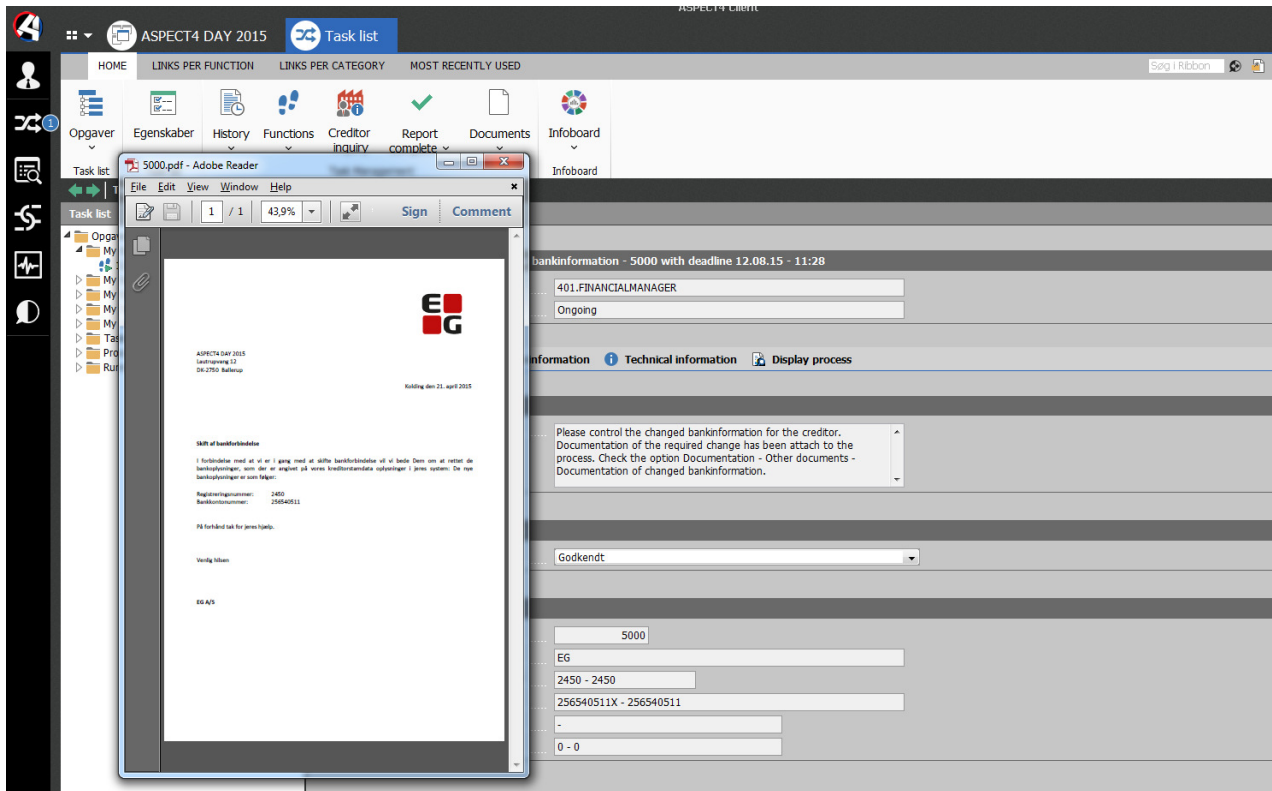
2.11 New screen for "Maintain payment proposal" (3220)

The screen for "Maintain payment proposal" has been given a facelift to provide a better overview of your payment proposal.

The application lets you change or deselect transactions for payment. You can no longer register transactions.

The Danish and Norwegian versions of "Maintain payment proposal" are now identical.

The Release 4 version of "Maintain payment proposal" can still be used.

2.12 Print payment proposals to a spreadsheet

ASPECT4 Release 5 lets you print the payment proposals from the applications "Create Payment Proposal" (3420) and "Maintain Payment Proposal"(3220) both to a printer and to a spreadsheet. The spreadsheet will be e-mailed to the user requesting the proposal.

ASPECT4 Release 5 includes a QueryManager application (EG3420QA) for print of the payment proposal to a spreadsheet. If you want to use spreadsheets with payment proposals, you have to specify this application in the application parameters for "Create Payment Proposal" (3420) and "Maintain Payment Proposal"(3220).

E:Print of payment proposal	
Print program for spool print.	EG3420RE
Do not print spool print.	0
QM application for execution.	EG3420QA

You can create your own payment proposal using QueryManager and then use this QueryManager application for print instead of the standard application included in ASPECT4 Release 5, if your company has your own requirements for the payment proposal.

2.13   Reverse factoring

Reverse factoring is when a financing company, e.g. a bank, intervenes between a company and its suppliers and commits itself to paying the company's invoices to its suppliers with a short turnaround time in exchange for a discount.

For ASPECT4 Release 5, we have created a solution that makes it possible to extract A/P invoice transactions and credit notes for payment using Reverse factoring through Danske Bank (Danish financing company).

The user requests an export of open A/P invoices/credit notes for payment using Reverse factoring. The run exports A/P invoice transactions with the payment form "Reverse factoring" (89). The amount for payment is calculated as the invoice amount minus the discount, which is calculated from Discount 1 on the transaction.

The export of invoice transactions has to be requested using the application "Reverse factoring" (3660):

- A payment list and a rejection list are printed automatically.
- The transactions are automatically sent for processing in Danske Bank using ASPECT4 Business Connector.

On the maturity date of the transactions (Maturity 3), Danske Bank withdraws the money on the selected bank account.
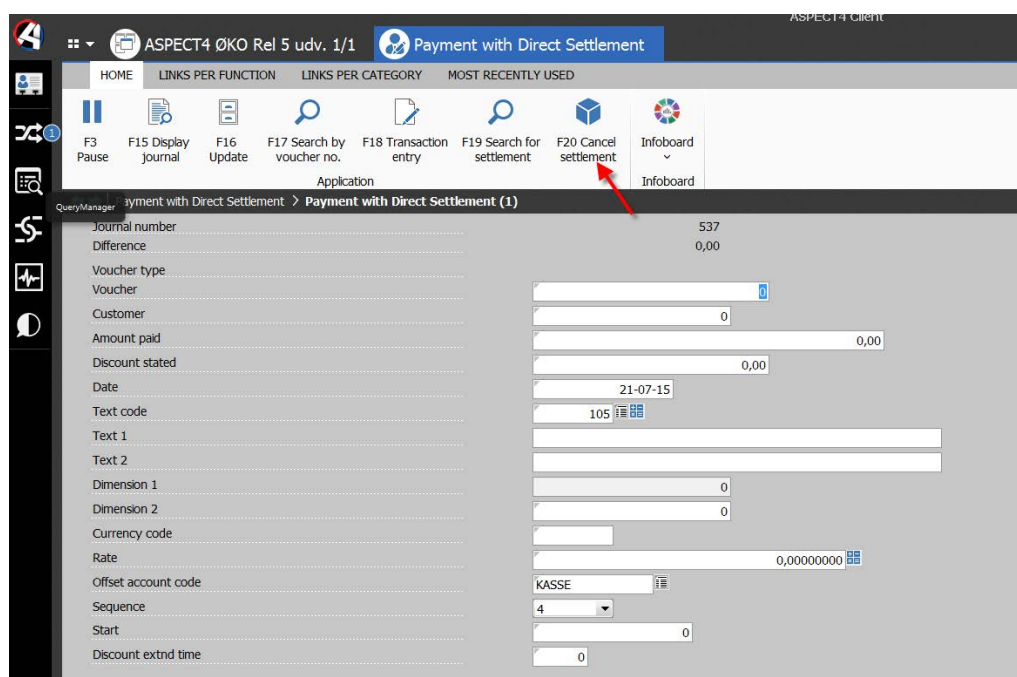
On the same date, the user has to export the transaction to payment proposals using the application "Create payment proposal" (3420), and subsequently they are processed and posted using the application "Maintain payment proposal" (3220).

2.14 Cancel settlements

ASPECT4 Release 5 lets you cancel a settlement made for either A/R transactions or A/P transactions in ASPECT4. A settlement can be cancelled before and after posting. However, a settlement cannot be cancelled if:

- A discount was applied in connection with the settlement.
- The settled transactions are in different currencies.
- The transaction has been subject to interest calculation after the settlement.
- The transaction has been subject to exchange rate adjustment after the settlement.
- The settlement date is in a closed period.

For direct settlement of A/R and A/P transactions in the applications "Payment with direct settlement" (2107) and "Register outgoing payments with direct settlement" (3107), you can use the option "Cancel settlement" to cancel a settlement made for the current journal.

The option "Cancel settlement":

The option "Extract":

The option "Cancel settlement":

If a journal has been posted, and you want to cancel a settlement on the journal, you can use the application "Cancel settlements" (2108) to cancel the incorrect settlement(s).

Enter a journal number to use when cancelling settlements.
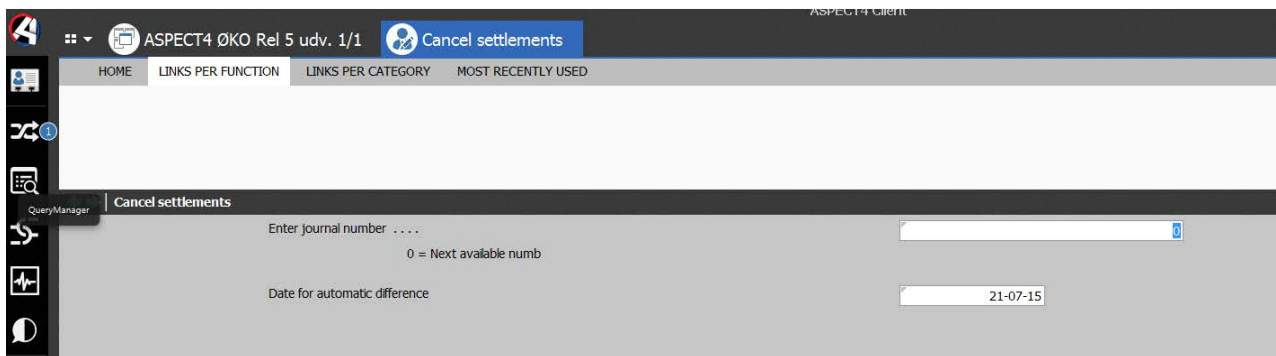
Then select the current settlement journal, and cancel the settlement as described above. When the settlement has been cancelled, the journal has to be transferred for posting.
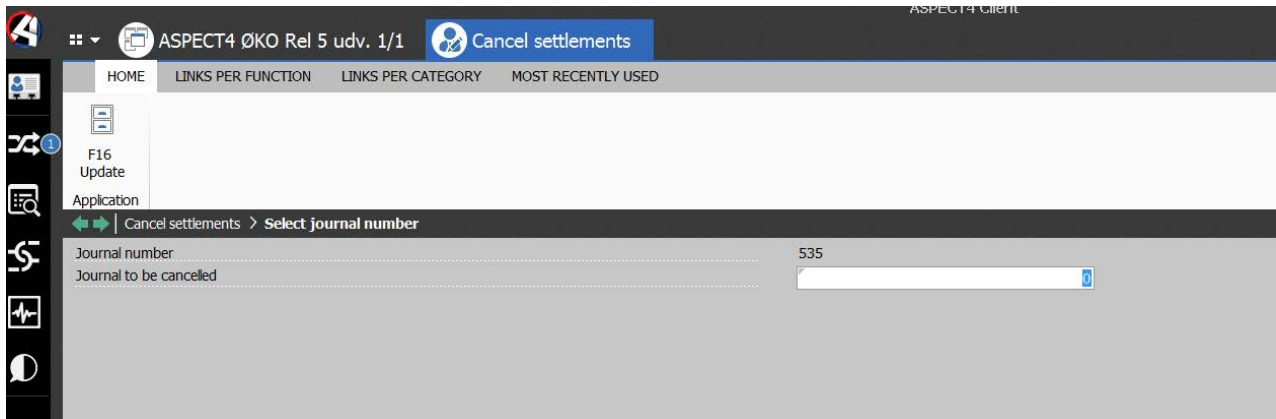
2.15 Maintain internet information

When calling the application "Maintain internet information" (2114/3114), you have direct access to maintenance of internet information/e-mail addresses for customers and suppliers.
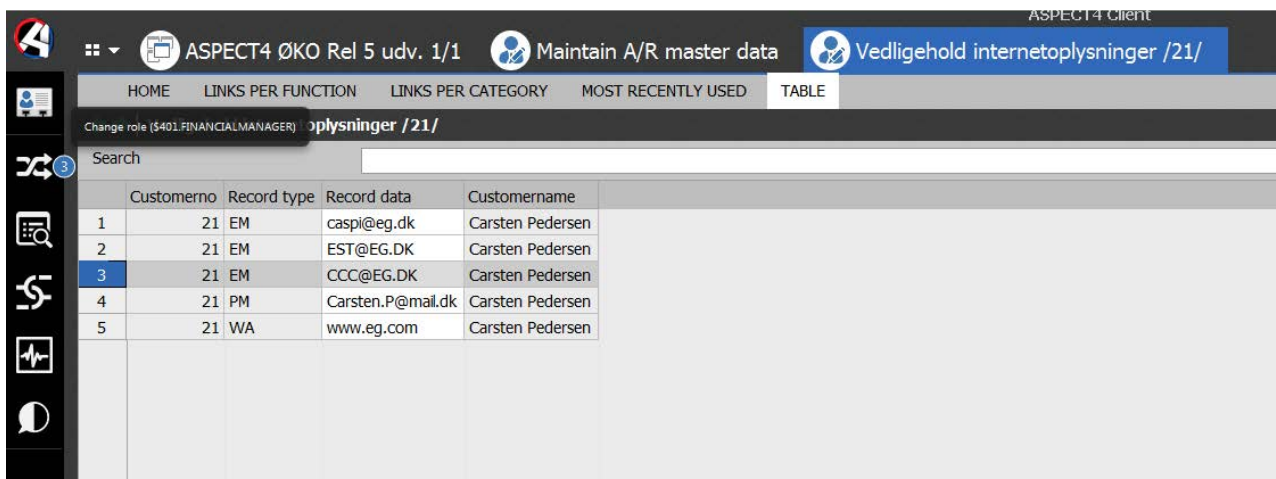

The application lets you change information both directly on the list and using the "Selection" option.

Using the search functionality in the application, you have the following options, among others:
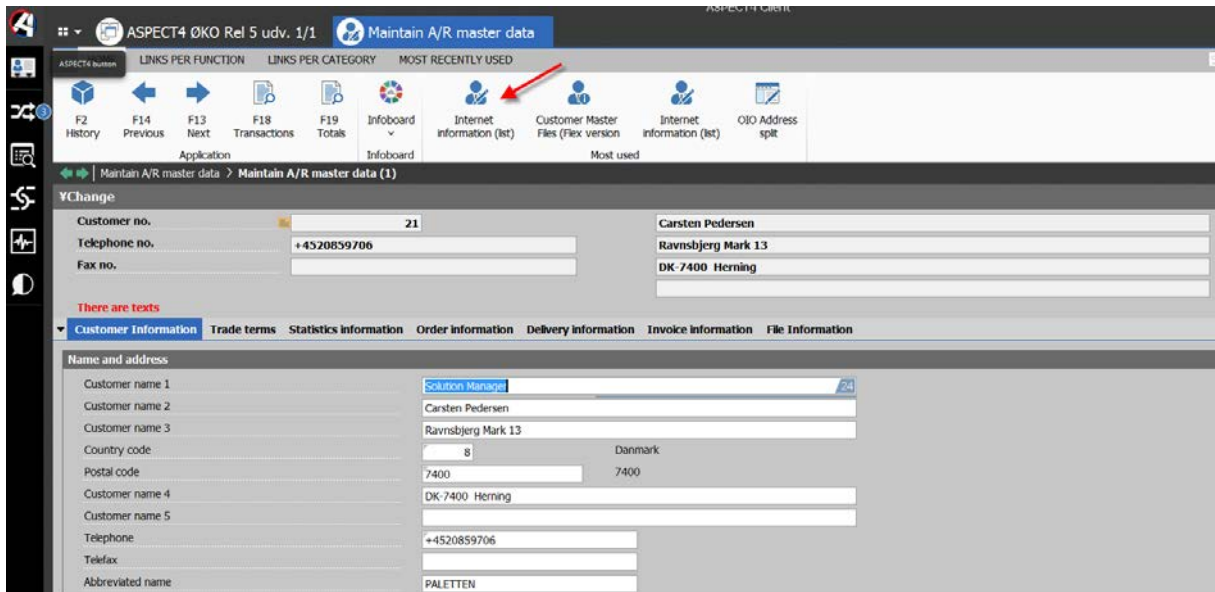
- To find a customer/supplier from an internet address/e-mail address
- To find all occurrences of a specific e-mail address
- To find all e-mail addresses for a specific record type.

When selecting a given row (address) in the table, you can use the customer number to go directly to a request for customer master data.
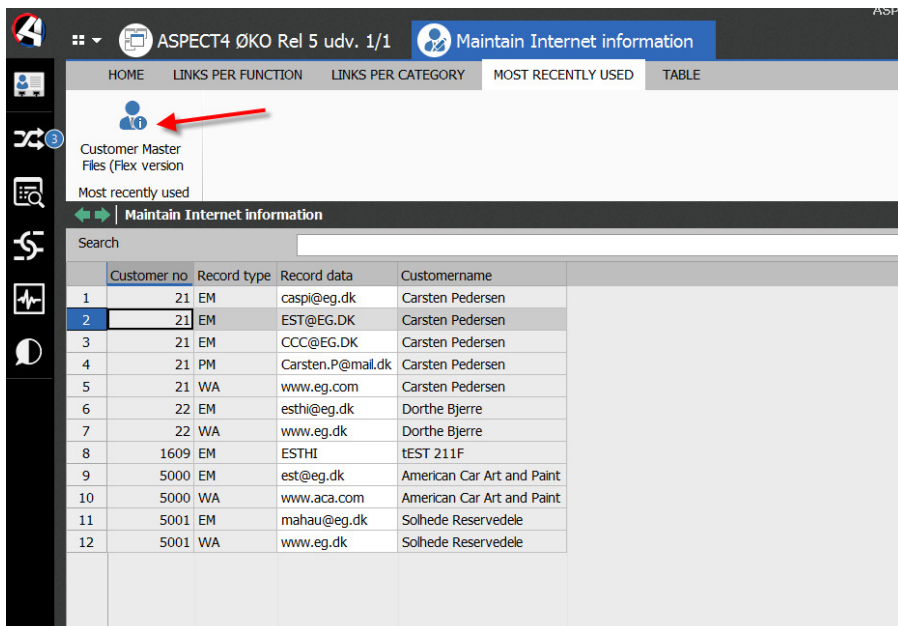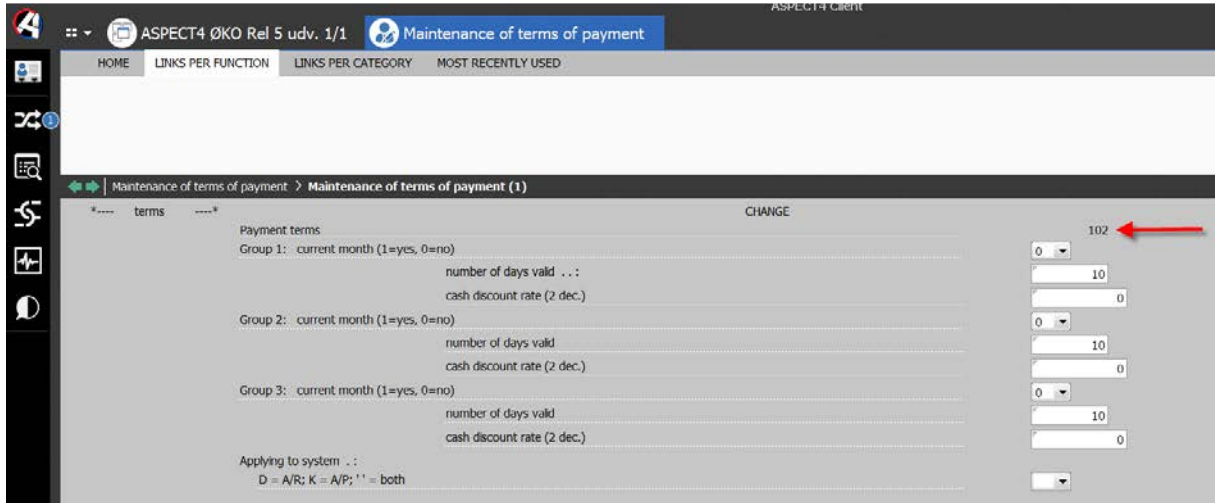

The application "Maintain internet information" can be called directly from the applications "Maintain A/R Master Data" (2111) and "Maintain A/P Master Data" (3111).

2.16 Up to 999 payment terms

ASPECT4 Release 5 introduces the possibility of using up to 999 payment terms in ASPECT4. The "Payment terms" field has been changed from being a 2-digit value to being a 3-digit value.

2.17 Posting of VAT reconciliation

You can now post VAT to the VAT settlement account when running "Print VAT reconciliation" (1436) and "Print VAT statement" (1437).

The Posting option has been added to both applications, since geographical variations exist in terms of which of the two applications are used in connection with ASPECT4 Financial Management.

Whether posting can be made or not when running the applications, is controlled by an application parameter. You specify if you want to post the VAT. If you want to do this, you can choose to post the sum on the VAT statement account and post the offset transaction on the relevant VAT accounts.

2.18 Integration of transactions from a spreadsheet to posting in ASPECT4 using ASPECT4 Business Connector

In ASPECT4 you can receive transactions from a spreadsheet for updates and posting. These transactions can now be received by ASPECT4 Business Connector.
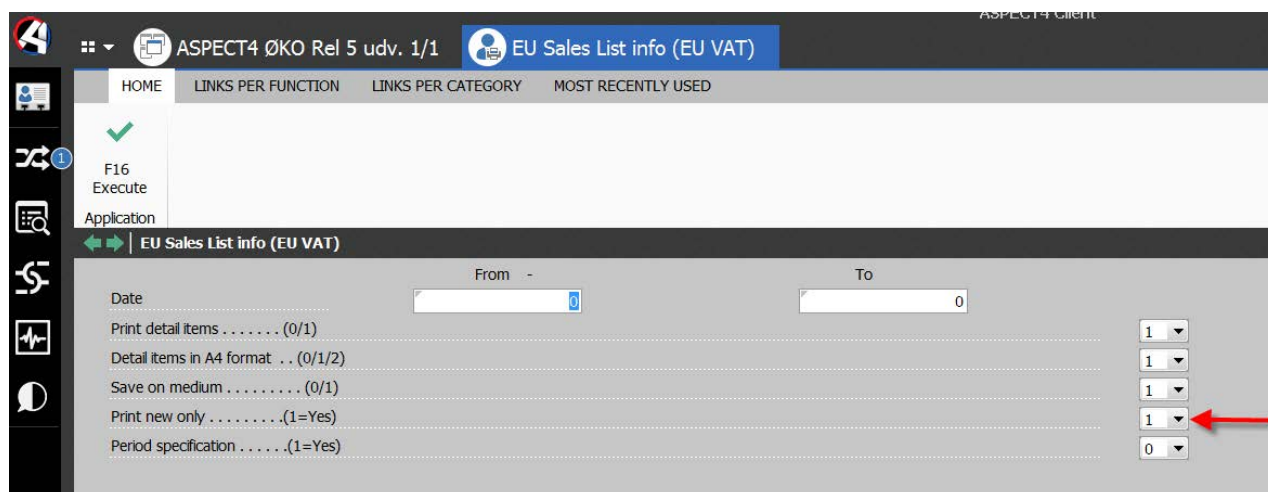
This means that:

• All transaction types can now be received from a spreadsheet.
• The spreadsheet can be archived in ABC as documentation for the posting.

You can still transfer transactions from a spreadsheet using Client Access.

2.19   Changes to the EU sales list (2437)

The Danish tax authorities (SKAT) require that you report to the EU sales list; in Denmark it has to be done every month no later than on the 20th day of the month. This means that new transactions may arrive later that have to be added to the EU sales list These transactions can now be printed without including the transactions that have already been printed.

The following change is only relevant for companies using ASPECT4 Logistics:

When creating the EU sales list using the application "EU sales list (EU VAT)" (2437), information will now be retrieved from ASPECT4 Logistics.

The following information from ASPECT4 Logistics can be relevant in this connection:

• Delivery country
• Item amount in currency
• Item amount in company currency
• Service amount in currency
• Service amount in company currency
• Triangular trade (yes/no)
• VAT number from transaction.
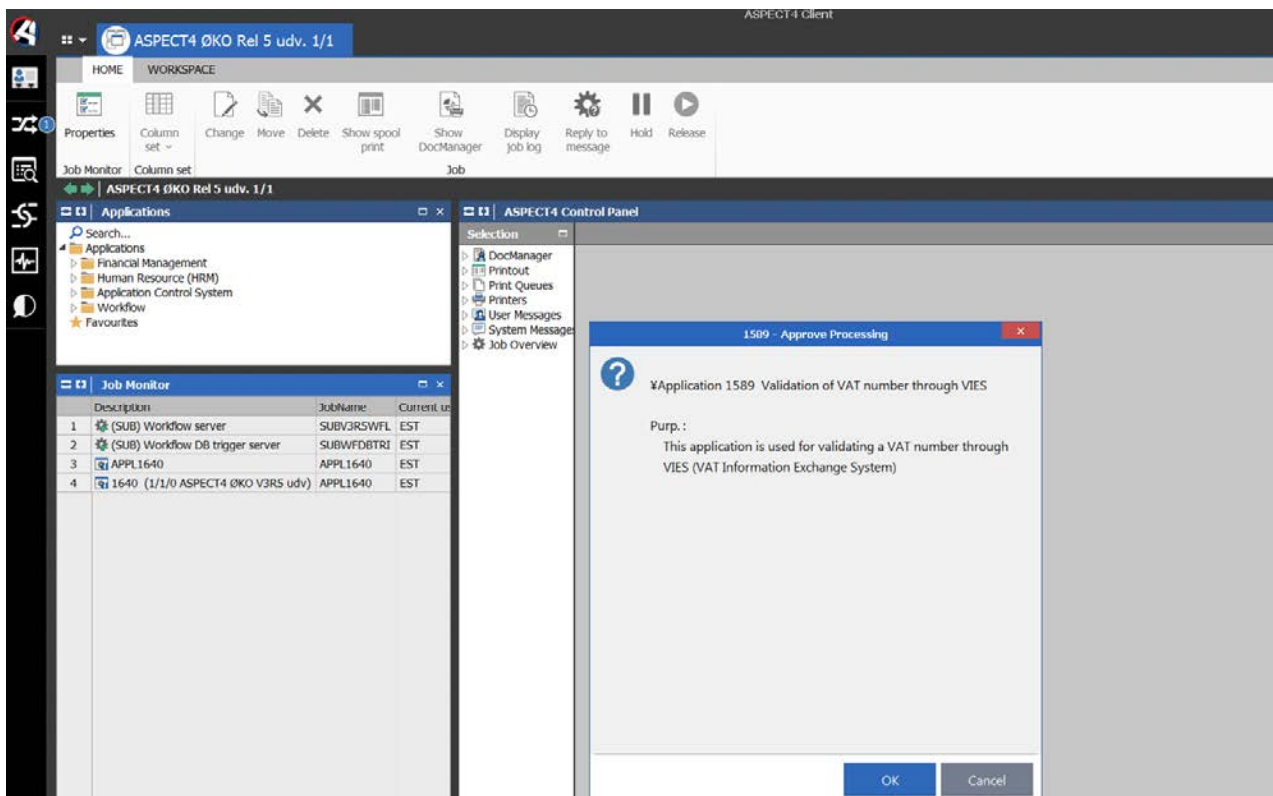
2.20   Validation of EU VAT numbers

ASPECT4 Financial Management Release 4 introduced functionality for validation of EU VAT numbers on customers and suppliers. With ASPECT4 Release 5, you can now also validate EU VAT numbers on delivery addresses in ASPECT4 Logistics.

The Danish tax authorities (SKAT) have a focus on EU sales without VAT. They require that the VAT numbers registered on your EU customers have to be correct. SKAT recommends that you check these numbers at least once every three months. If a VAT number is invalid, your company will be liable for the missing sales VAT. The solution is based on a web service available from EU, and what you see in this solution is

the result from this web service. EG does NOT carry any kind of responsibility for the data delivered from the EU VIES solution.

The purpose of this periodical control is to run through all active EU customers and EU suppliers and check that their VAT numbers are valid, and to retrieve the name and address that belongs to a VAT number.

The application "Validation of EU VAT number through VIES" (1589) reads and validates the EU VAT number for all customers and suppliers that are based in an EU country.

The application "Check of EU VAT numbers" (1380) displays a list of customers and suppliers per run with an indication of whether they are valid or not, and a control digit for auditing.

2.21   Automatic allocation of a new customer or vendor number on creation of master data

ASPECT4 Release 5 introduces the possibility of automatic allocation of a new number when you create either a customer or a vendor using the application "Maintain master data" (2111 or 3111).

The number assignment is based on a setting in General files section 2112/3112, "Range for automatic number allocation on creation".

The number is allocated based on the used application and the current function group/user. The section is searched in the following order:

1. Current application plus current user
2. Current application plus function group
3. Current application
4. Current user
5. Current function group
6. Globally.

2.22 Test for open journals on exchange rate adjustment

A new and more specific test has been created to check if it is acceptable to make an exchange rate adjustment in the application "Currency information" (1250). Before the exchange rate adjustment is started, an automatic test is performed to check for unposted transactions for the subsystem for which you want to perform exchange rate adjustment. If you have selected several subsystems for exchange rate adjustment at the same time, the test will be performed on all the selected subsystems. The test is not performed in connection with an exchange rate adjustment simulation.

The following tests are performed per subsystem:

- Finance
  - The system tests for ledger transactions on open journals in one or more of the selected currencies with a date that comes before or equals the adjustment date. The test is only performed on transactions that are posted on accounts marked for adjustment as specified by their rate adjustment code.
  - If one or more control accounts are to be exchange rate adjusted according to their rate adjustment code, a test is performed to check if A/R or A/P transactions exist on open journals in one or more of the selected currencies.

- Accounts Receivable
  - The system tests for A/R transactions or A/R settlements on open journals in one or more of the selected currencies.

- Accounts Payable
  - The system tests for A/P transactions or A/P settlements on open journals in one or more of the selected currencies.

2.23 Changing A/P transactions (3213)

You can now change the following fields on an A/P transaction using the application "Maintain A/P transaction" (3213):

- The processing number and processing date for payment using Reverse factoring.
- Date of submission to bank and maturity/payment date for payments through EBF in Norway.

In the usual way, the application parameter determines if the added fields are open for maintenance.

2.24 Event and Exception Manager in ASPECT4 Financial Management

See the function description "EEM" for more details about the options available in ASPECT4 Financial Management for setting up Event and Exception Manager solutions.

2.24.1 Check for difference and/or account errors – "UPDATEOFACCOUNTS" system area

When posting, a check for journal differences and/or account errors is performed. If a difference in the journal or an account error has occurred, a notification will be sent by e-mail. If you set up a notification recipient for the "UPDATEOFACCOUNTS" system area, the recipient will be notified of differences and/or account errors.

2.24.2 Interface journal with errors – "INTERFACE" system area

Interface journals in application 1381 may contain errors. Sometimes, journals do not balance. Normally, you will not be aware of this as the journal is simply posted automatically. If you set up a notification recipient for the "INTERFACE" system area, the recipient will be notified by e-mail if an error exists in an interface journal.

2.24.3 A/R and A/P account reconciliation – "BALANCECONTROL" system area

Application 2440/3440 lets you reconcile A/R and A/P against control accounts. Using settings in EEM, a notification recipient can subscribe to the "BALANCECONTROL" system area and a severity of 10, equalling a notification. In section 2210, for 2440 and 3440 respectively, you set up the threshold values – i.e. differences – to be checked for either on control accounts or at totals level. If the desired values have been set up in the section, you will be notified when the thresholds are exceeded. You will receive an e-mail informing you that a difference has been detected during the check of balances, and you can follow up using the output print generated by the applications.

2.25 Miscellaneous minor changes

2.25.1 Customer account statements (2433)

You can select "Balance in customer currency" with from/to values as selection criteria.

2.25.2 Receive payments (2267)

In connection with payments from Danske Bank (Danish bank), you can find the customer solely based on the voucher number in the payment identification.

2.25.3 Obtain exchange rates (1252/1253)

When obtaining exchange rates, you can now use a setting to make the exchange rates apply from "tomorrow" or another date in the future.

2.25.4 Bank reconciliation (1207)

The bank reconciliation code has been moved to a new field on the transaction.

2.25.5 Posting (1640)

Using a parameter, you now determine whether or not collective entries should be compressed.

2.25.6 Company number/organisation number (KORGNR) added to the A/P file

The field is used for entering a company number/organisation number like the Danish CVR number.
The field may be used with letters included or with leading numbers required in the company number (as e.g. in Finland).

3 News included in functionality updates for ASPECT4 Release 4

3.1 A/P payments through Sydbank

You can now create automatic A/P payments for processing through Sydbank (Danish bank).

Like other A/P payments in ASPECT4, A/P payments to Sydbank are processed using the applications "Create payment proposal" (3420) and "Automatic payments" (3220).

In order to execute automatic payments in the system, the individual vendor is created with a payment form code that specifies how the payment should be made, e.g. if a payment is local. Moreover, information for controlling the payment, e.g. an IBAN number, is registered for the individual vendor.

When executing automatic A/P payments, ASPECT4 Financial Management allows you to create payment transactions to Sydbank. These transactions can then be transferred and imported to Sydbank.

You can use local payments in Denmark (account-to-account and FI payments), local payments abroad (account-to-account), foreign payments from Denmark to abroad (account-to-account) and foreign payments from abroad (account-to-account).

3.2 Reverse VAT liability

On the 20th of December 2013, the Danish parliament (Folketinget) passed a law introducing reverse VAT liability for domestic trade of mobile phones, gaming consoles, tablets, portable computers, etc. to be in effect from the 1st of July 2014. The purpose of this is primarily to avoid VAT carousel fraud, i.e. the seller charges VAT, but does not pay the VAT to the tax authorities.

The seller does not charge VAT for the sale, but indicates on the invoice that the buyer has to pay the VAT. This can be done by adding the text: "Reverse charge – buyer pays VAT". The sale has to be specified on the Danish VAT statement in Field C. The buyer, on the other hand, has to specify the VAT on their VAT statement and deduct the VAT to the extent that the buyer is entitled to do this.

ASPECT4 includes support for reverse VAT liability in the way that you can automatically post the reversed VAT on separate accounts.

Please contact your EG consultant to get assistance for the setup.

3.3   Follow-up on scanned vendor invoices

A new function in ASPECT4 makes it possible to follow up on invoices that end up as supplier invoices after being scanned through Multi-Support Next.

The application checks all scanned invoices that have not previously been reported completed in a number of areas (you specify yourself which tests you want to be performed):

1. Is the invoice stranded in the application "Maintain scanned invoices" (3207)?
2. Is the invoice stranded in the application "Interface journals" (1381)?
3. Has the invoice been posted to an accruals account?
4. Has the invoice been approved for payment?
5. Has the invoice been posted to an account payable?
6. Has the invoice been retrieved by the requesting system?
7. Is the requisition number as expected?
8. Has the invoice been archived in MultiArchive?

The test is performed using a gradient analysis in accordance with the scanning date, which means that the older the invoice is (i.e. the longer time it has been stranded in the system), the higher the error code on the invoice will be.

3.4   Collection of payments using Betalingsservice

In ASPECT4 you can collect payments using Nets Betalingsservice (Danish direct debit product). The solution is directed at companies with many private customers.

Registration and deregistration for Betalingsservice can either be done in ASPECT4 with information sent automatically to Nets or vice versa.

Collection service via Nets		
Drawing code	60	Nets Betalingsservice
Registration code for Nets		Not registered for PBS
Date of registration for Nets	20150227	
Date of deregistr. from Nets	20150101	

When a payment is going to be collected through Betalingsservice, a payment drawing has to be sent to Nets no later than on the sixth last working day of the month in order for Nets to carry out the drawing in the following month.

In ASPECT4, a payment drawing proposal containing the invoices/credit notes due in the coming month, is created using the application "Select A/R transactions for drawing" (2425). This proposal can later be edited using the application "Maintain drawings" (2250).

When a proposal has been processed, it has to be approved and then set to Nets. A drawing request is sent to Nets per customer per maturity date. If the maturity date of an invoice/a credit note does not fall on a banking day, the date is changed to the succeeding banking day. Nets uses the maturity date as the draw date. If the balance of a customer is negative, a drawing request for depositing money on the customer account is created instead.

Nets now processes the request for drawing, i.e. the customers are notified and the money is withdrawn. If the customer does not have an agreement with Nets, Nets sends the collection by letter to the customer. This provides the customer with the option of signing up for Betalingsservice and/or pay the collection.

For each draw date, Nets sends back information on the drawings that have been completed and those that have been rejected. However, Nets does not send a reply if a drawing request has been sent to a customer who does NOT have an agreement with Nets and who does NOT pay the submitted collection. You can manually remove the marking for drawing on these invoices/credit notes using the application "Maintain A/R Transactions" (2213).

The payment drawings from Nets are processed, i.e. the payments have to be received and posted. The paid invoices/credit notes are automatically settled using the application "Receive payments" (2267). The
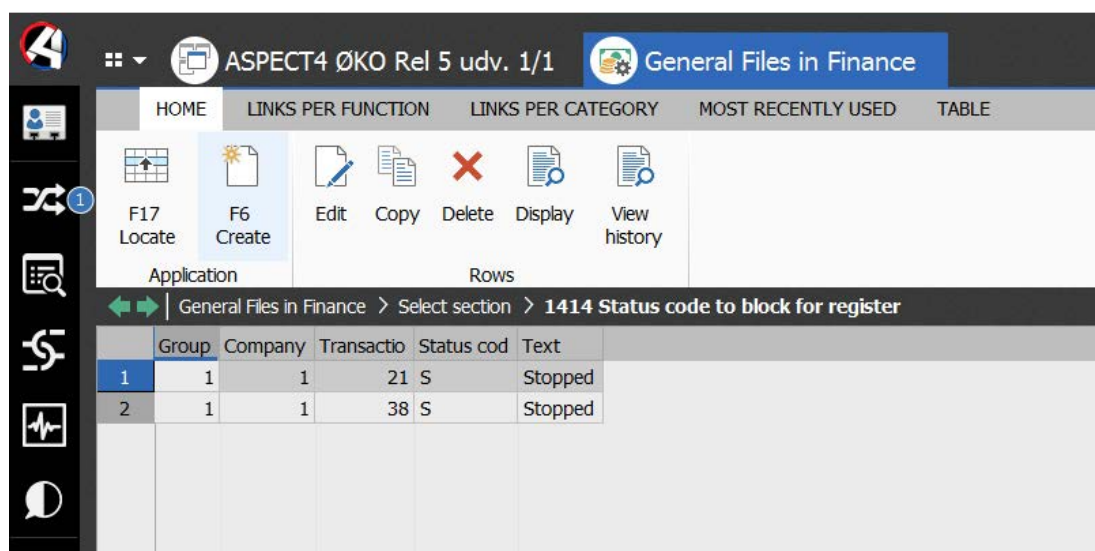
marking for drawing is removed from the invoices/credit notes that are rejected by Nets, and a rejection list is e-mailed to the user.

ASPECT4 lets you print a list of all invoices/credit notes that have been sent for payment drawing through Nets, and for which the drawing has not yet been registered in ASPECT4.

3.5 Status code blocks for registration of transactions in A/R and A/P in ASPECT4 Financial Management

You can now block for registration of A/R or A/P transactions in Accounts receivable/Accounts payable with a status code of your own choice per transaction id.

For example, you can set up the system to make it impossible to register A/R invoice transactions on customers marked as stopped (S):

The block for registration is valid in the applications "Pre-entry of vendor invoices" (1241), "Voucher registration" (1242) and "Posting of interface transactions" (1282).

3.6 Foreign A/P payments from Germany for processing through Danske Bank

You can create foreign A/P payments for payment from an account in Germany through Danske Bank (Danish bank).

In order to be able to make a foreign payment from Germany through Danske Bank, the individual vendor has to be created with the payment form code 35.

3.7 Display of vouchers

ASPECT4 Financial Management now lets you display archived documents by requesting a specific voucher or specific master data (account/customer/supplier/fixed assets/project).

The vouchers can be displayed on request from ASPECT4 Client (both common inquiries and cockpit inquiries) and from ASPECT4 CrossPad apps.

Using a setup in ASPECT4 you define per application/app in which you want to be able to display archived vouchers, in which key fields the documents have been archived.

Access to the following archives is possible:

1. Documents placed in the archive of Multi-Support Next
2. Documents placed on the IFS (i.e. documents saved on the iSeries server)
3. Documents placed on an external server.

The following file types can be displayed:

- PDF, GIF, JPEG, TXT, HTML.

Example from "Inquire into vouchers" (1333):

3.8 Automatic settlement of A/R or A/P transactions (2281/3281)

You can now automatically settle open transaction on customers or vendors. For the settlement to take place, the sum of the transactions selected in the application has to be zero.

The settlement is made as specified in the following settings:

4   Database modifications in ASPECT4 Financial Management Release 5

4.1   Files modified in Release 5 of ASPECT4 Financial Management:

File name	New fields
DEBREGT1	The file has been expanded with the following field: KBICNO (BIC number)
KREREGT1	The file has been expanded with the following fields: KORGNR (Organisation number) KANTMD (Number of months before an invoice number can be used again) KRFBET (Reverse factoring – payment term) KRFRSP (Reverse factoring – number of days of grace) KRFDEB (Reverse factoring – customer number in the bank) KRFACC (Reverse factoring – account number)
PSTREGT1	The file has been expanded with the following field: PAFSTM (Code for reconciliation)
PSTHDRT1	The file has been expanded with the following field: HOPHJO (Journal copied/cancelled from)
DEBHSTT1	The file has been expanded with the following field: ROPHKD (Created from a cancelled settlement)
KREHSTT1	The file has been expanded with the following field: ROPHKD (Created from a cancelled settlement)
ECOARIT1	The file has been expanded with the following field: IFDDYN (Updated dynamically)
ECOAPIT1	The file has been expanded with the following field: IFKDYN (Updated dynamically)
DEBPSTT1	The file has been expanded with the following field: LSTDAT (Date when transaction was printed to the EU sales list)
KREPSTT1	The file has been expanded with the following field: LSTDAT (Date when transaction was printed to the EU sales list) SCFKOR (Reverse factoring – processing number) SCFDAT (Reverse factoring – processing date)

In the following files, the payment term has been expanded to 3 digits:

Affected files
DEBPSTT1
DEBREGT1
ILDPSTT3
ILKPSTT3

Affected files
IMPPSTT1
IMPRECT1
IMPSTMP1
IMTABCT1
IMTABCT3
INDPSTT4
INKPSTT4
KREOCRT1
KREPSTT1
KREREGT1
BETACCP1
BETBEKP1
DEBKMPP1
DEBHRYP1
DEBPRYP1
DEBRNTP1
EGWDEBP1
EGWKREP1
ENTAKTT1
ENTARTT1
ENTDAKT1
ENTDIMT1
ENTETAT1
ENTFAHT1
ENTFAWT1
ENTFBHT1
ENTMBHT1
ENTMOHT1
ENTMOWT1
ENTNFGT1
ENTSAGT1
ENTWAKP1
ENTWDAP1
ENTWETP1
ENTWFAT1

Affected files
ENTWSAP1
KRECHGP1
KRPKMPP1

All Contract Costing Control files are DDL converted on installation of ASPECT4 Financial Management Release 5.

4.2 Notice about uninstallation of applications

I ASPECT4 Release 6 the following applications will be uninstalled:

Posting from MultiArchive (3206)
Print file cards – customers (2401/2403)
Print file cards – suppliers (3401/3403)
Temporary transfer (1160)
Print parameters, temporary transfer (1460)

4.3 Installation and conversion

ASPECT4 Financial Management Release 5 requires ASPECT4 Foundation Release 5. For further information, please refer to the description of ASPECT4 Foundation Release 5.

When ASPECT4 Financial Management release 5 is shipped, you will receive a document that describes the contents of the individual elements. But most importantly, it describes the activities to be carried out prior to the installation, and the activities to be carried out after the installation.

You can download the description from the EG homepage:

http://eg.dk/kompetencer/erp-systemer/aspect4/dokumentation/releasehaefter

It is very important that you carry out the activities in the prescribed sequence; naturally, you are also welcome to leave the completion to your consultant for ASPECT4 Financial Management.

1 Introduction to Release 5 of ASPECT4 Foundation

ASPECT4 Release 5 continues where Release 4 left off - not only in terms of the sequential number, but also its contents. The predominant themes of ASPECT4 Release 4 were mobility and the simplicity that characterizes mobile apps on smartphones and tablets. Release 4 was also the ASPECT4 release with the fastest penetration of the market ever. The dialogue with our ASPECT4 customers has taught us that customers and users highly appreciate simplicity and to be able to bring their consumer habits with them into their professional activity, so to speak.

One of these consumer habits is the option of using their preferred search engine for global information. Google searches have even given their name to a new verb when we "google" in order to find what we are looking for. We are inspired by this in an ASPECT4 context, and we have noted that as consumers, we prefer search engines that deliver simplicity, speed and accuracy. With ASPECT4 Insight Search, ASPECT4 Release 5 offers the same experience and efficiency – and some additional features.

Generally, Release 5 is introduced under the theme of ASPECT4 Insight, and in addition to its strong and efficient search, ASPECT4 Insight also offers other types of insight and overview. One of the important new developments is ASPECT4 Insight Infoboards – or in brief: Infoboards. Infoboards are a new concept for providing a fast and relevant overview presenting essential and relevant information about ASPECT4 business objects – in relation to the use context. These overviews, i.e. infoboards, are a further development of the Stepping Stone concept, which was introduced in ASPECT4 Release 3.

In addition to ASPECT4 Insight, a number of major and minor extensions and developments of ASPECT4 have been made, e.g. for the ASPECT4 Client, the EG CrossPad mobility platform and the ASPECT4 Query-Manager reporting tool. Here you find a number of new developments in direct continuation of the theme – all with the purpose of giving users better overview and insight as the basis for faster and better business decisions and process support in the daily work.

ASPECT4 Release 5 also contains a number of improvements and extensions to support the modern user of ERP functionality and information.

2 Overview

Insight Search

ASPECT4 Insight Search introduces a new and very strong search concept enabling search for all types of ASPECT4 data as well as the information surrounding ASPECT4. Inspired by Google Search, these high-performing searches have focus on simplicity, speed and accuracy. A special topic within accuracy is the concept of "hot data" in combination with search ranking. In short, this means that the user experiences better chances of finding what they look for at the top of the search results list, since the search takes into account how the user previously worked with data. This is referred to as an adaptive search, i.e. the search process learns from previous searches and the user's latest search behaviour.

Infoboards

In Release 3, Stepping Stones were introduced – a concept used for describing that ASPECT4 business objects in general make themselves technically "visible and active" through the common user interface, ASPECT4 Client. Stepping Stones have been used for presenting application links (shortcuts), carry notes and function as an integration point towards the document management solution EG CrossWork. In Release 5, a new application is introduced, called Infoboards, which is a type of information board used for providing a quick overview in a number of usage situations. The individual board can be set up using a number of graphical components which can be combined for very specific or more general purposes. Infoboards can be included in search results from Insight Search and are available from the ribbon in ASPECT4 Client. In addition, Infoboards are available from mobile apps developed in EG CrossPad.

CrossPad

The development platform for mobile apps has been expanded and adjusted. The adjustments are primarily in the area of look-and-feel changes in order to match the latest versions of the iOS and Android operating systems. One of the most important extensions is the general introduction of a "sidebar", which can be activated from CrossPad apps by pressing and holding your finger on the screen for a few moments. The sidebar gives you access to functions within the current app, but also cross-functions between apps – such as shortcuts to other apps based on the Stepping Stone principles. The same principles also make it possible to display Infoboards as an integrated part of a CrossPad app. Other important new developments in CrossPad are support of notifications (push messages and message counter) and iBeacons (physical or logical units that can communicate with CrossPad apps when a smartphone or tablet is in the vicinity). New apps have also been added, e.g. for travel administration and operations management (monitoring and some functions for IBM administration).

QueryManager

In Release 4 it became possible to build mobile apps using the QueryManager+ extension. In Release 5 this possibility has been extended with support of even more of the CrossPad functionality. QueryManager+ can now also be used for building even more advanced applications for ASPECT4 Client – e.g. with the possibility of editing data content in tables if the relevant permissions are defined. Data reporting from non-ASPECT4 sources is another new development with exciting potential – especially if this type of query is combined with ASPECT4 data. Once again, the list of new developments for QueryManager is quite long.

Client

To follow tradition, Release 5 also includes new developments for the desktop client, ASPECT4 Client. A facelift is the very visible element in the changes, but the release also contains a number of improvements and extensions to support the Release 5 theme, "ASPECT4 Insight". Among these are column sets, which provide exciting new options in tables, and split view, which combines row-based and panel-based (page-based) content.

Activity Streams

A novelty in Release 4 was Activity Streams, which makes it possible to add simple and informative posts on news walls – both user posts and the so-called system posts that are generated by ASPECT4 Workflow Management. In Release 5, we find a number of extensions for this. For example, system posts are now easier to set up using Workflow Management, and new "content suppliers" have been introduced for automatic posts. System posts can now also be published by QueryManager and Event and Exception Manager. In addition, it is now easier to create and manage news subscriptions. Several industry-specific ASPECT4 systems also release standard system posts.

ASPECT4 Business Integrator

Release 4 introduced a new concept that we called "batch triggers". This concept has been expanded for Release 5 and is now relaunched with a new concept name: ASPECT4 Business Integrator. As the name implies, it also refers to the tool as a direct extension of the general concept for data import/export, i.e. ASPECT4 Business Connector. ASPECT4 Business Integrator – also known as ABI – is a tool for data synchronisation between ASPECT4 components or between ASPECT4 components and external components, and focuses on data export. Among the many functions of the ABI, you find many new and modernised replacements for the existing database trigger and data history concepts.

ASPECT4 Business Connector

Release 5 for ABC contains improvements to debugging and provides a better overview of documents. In addition, Infoboards are now also used in ABC. For example, InfoBoards in ABC give a quick overview of documents per day, and which documents have been processed.

ASPECT4 Workflow

Workflow for Release 5 has several extensions and improvements. Among others, you can now see the number of pending tasks on the workflow icon on the shortcut bar. You can also see this in the mobile version of Task list on CrossPad, and here you can also be notified about new tasks with push messages.

3 Independent new developments

3.1   Insight Search

One of the major new developments in Release 5 is the search functionality now available in ASPECT4, which is similar to what you know from Google. This functionality is called Insight Search, and using this tool, you can search across all business objects in ASPECT4. The business objects can be e.g. customers, suppliers, items, sales representatives, accounts, employees.

This search will be available no matter where in ASPECT4 Client the user is. Using a keyboard shortcut, Ctrl+Space, you initiate the function called "Quick Search". The search can also be used for starting and searching for traditional applications. The experienced ASPECT4 user will soon realise that it is much easier to use Quick Search for starting new applications than the traditional keyboard shortcut, Alt+N.

Quick Search is displayed as a pop-up window divided into different sections. These sections show e.g. the searches previously made by the user. From here you can repeat previous searches and select active tabs, and the individual user can see the applications and commands for which they have authorisation, and that match the search criteria.

Note that these searches across ASPECT4 business objects are what we call Insight Search:
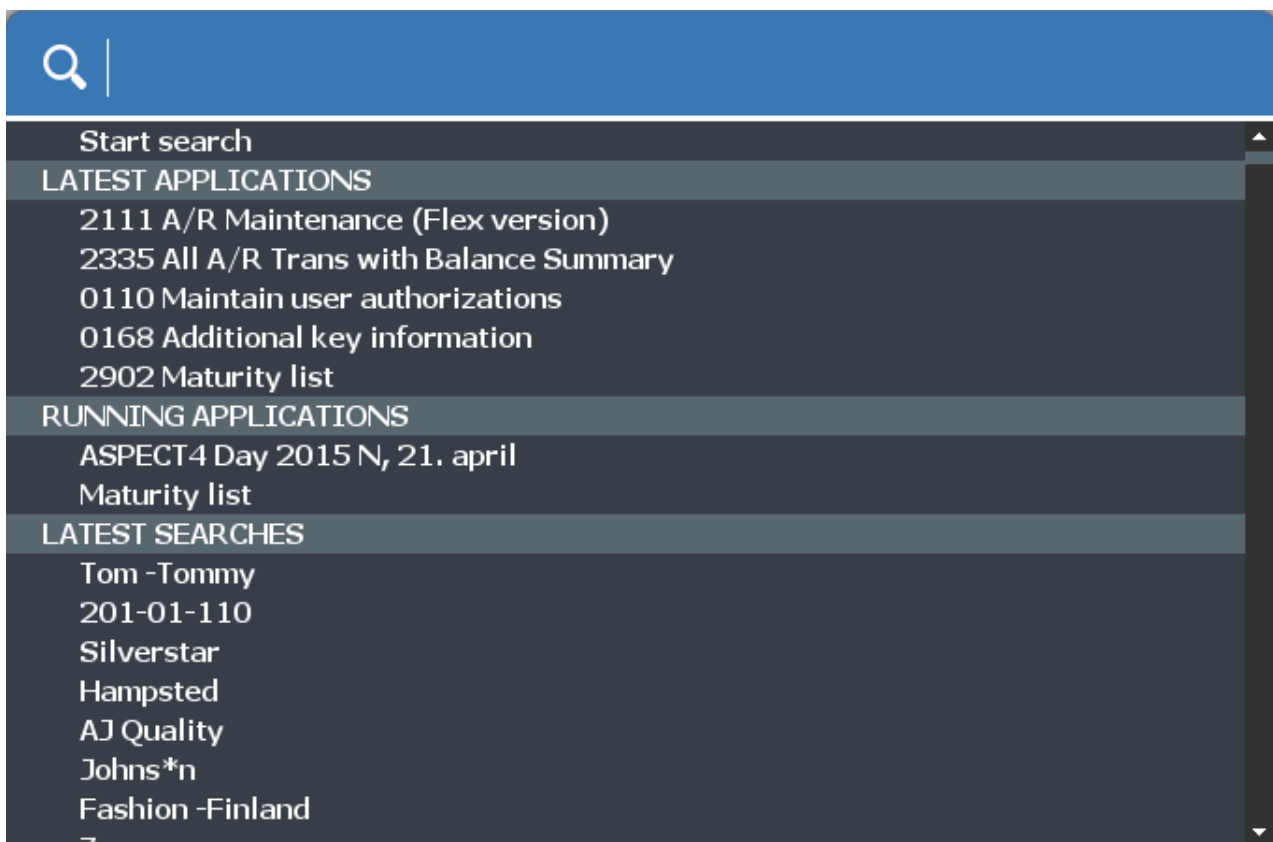
You start a new search by entering one or more search words (or part of words), then you use the arrow keys to navigate to "Start search" on the next line, and finally you press Enter. You can search in business objects, help descriptions and images.

In the example below, we have entered "Brand* kids" to find all business objects with "Brand" and "kids" in the name. The result is displayed below:
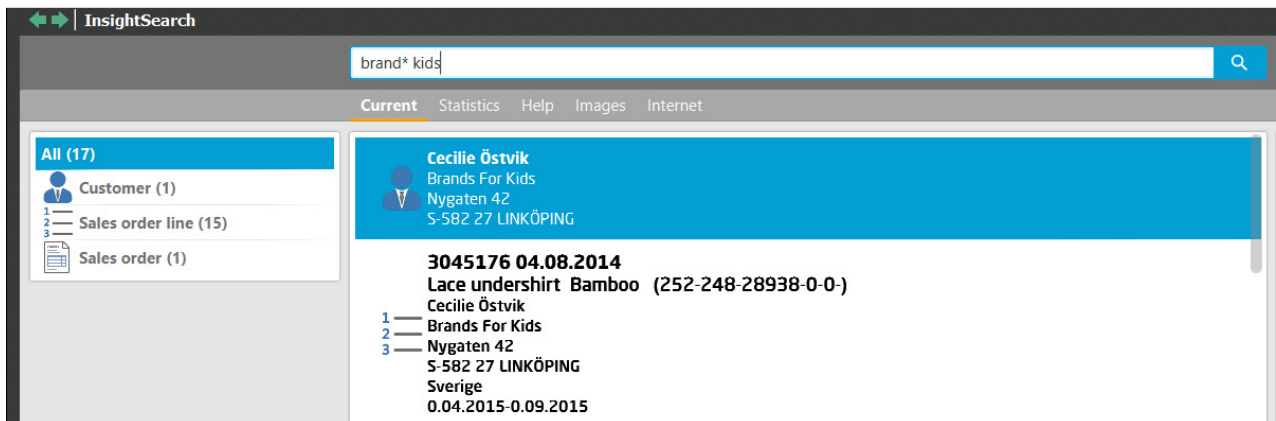
In the area to the left, you can see that both customers, sales order lines and sales orders exist that match the search criteria. The search is intelligent, which means that the data that the user has most recently showed an interest in or worked with, are displayed at the top of the list. This is called hot data.

You have several options for narrowing down your search. One method is to use the right-click menu to select an area to search (search predicate). In the example below, the user wants to see customers only:
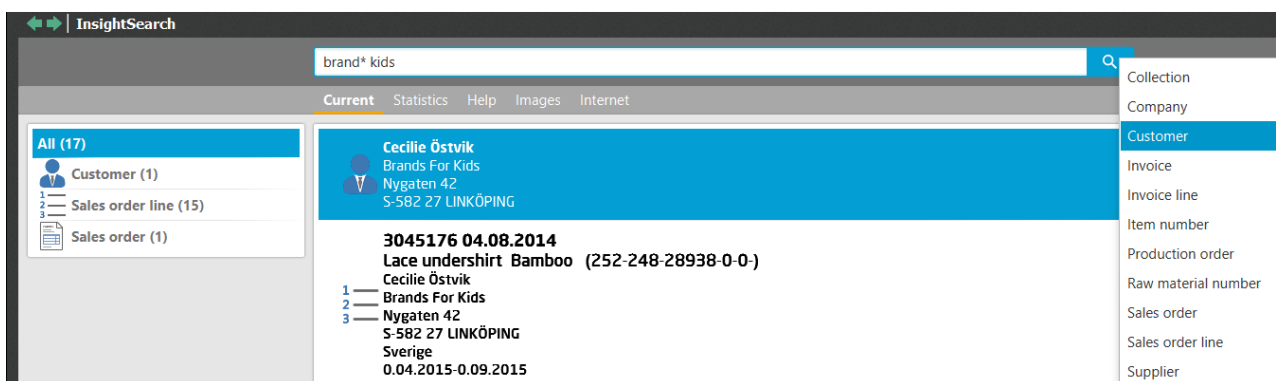

As you can see, the way that we search in ASPECT4 Insight Search is very similar to the way that we google.

The search is phonetic, and *, AND, OR, etc. can be used. For more information, see the function description INSEARCH.

Under the search field, different tabs are displayed. By default, the following tabs are available: Current, Statistics, Help, Images and Internet, and more tabs can be set up as required. By default, you search in "Current". This tab contains the primary business objects, such as customers, suppliers, items, accounts, users, sales representatives and open orders. The Statistics tab is meant for data of a historical interest, e.g. last year's sales statistics. If you click the "Statistics" tab, the search will start in these data.

The result of a search is displayed in the central part of the screen. To the right in the illustration, you see another new development in Release 5 – an infoboard. Example:
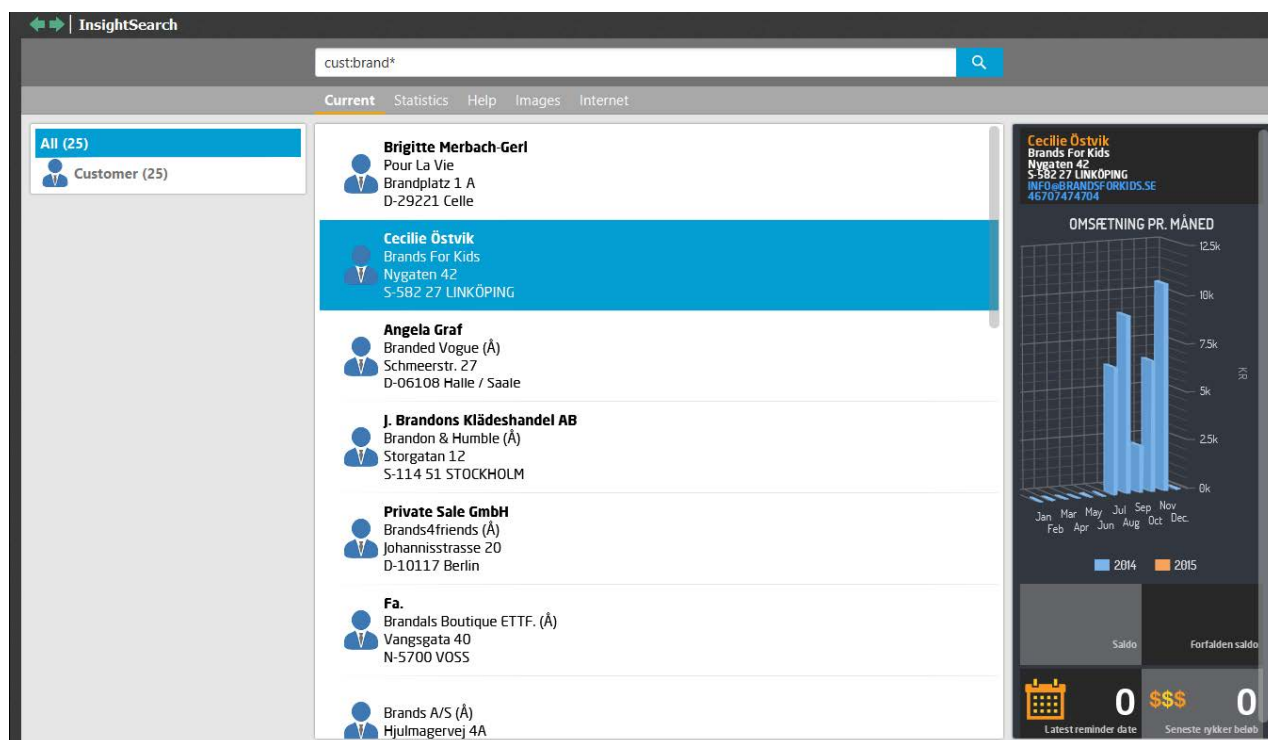
The infoboard has different contents depending on what is currently selected: a customer, a supplier, a user, an order, etc. Infoboards are described in another section of the release notes (3.2).

A major advantage of using Insight Search is that you can now use Stepping Stone links on the ribbon at the top to jump to other relevant applications, e.g. master data, queries or similar. For example, if a customer is selected in the result list, the ribbon will provide an easy and elegant option for jumping directly to the customer's master data, inquiring on their balances, etc.
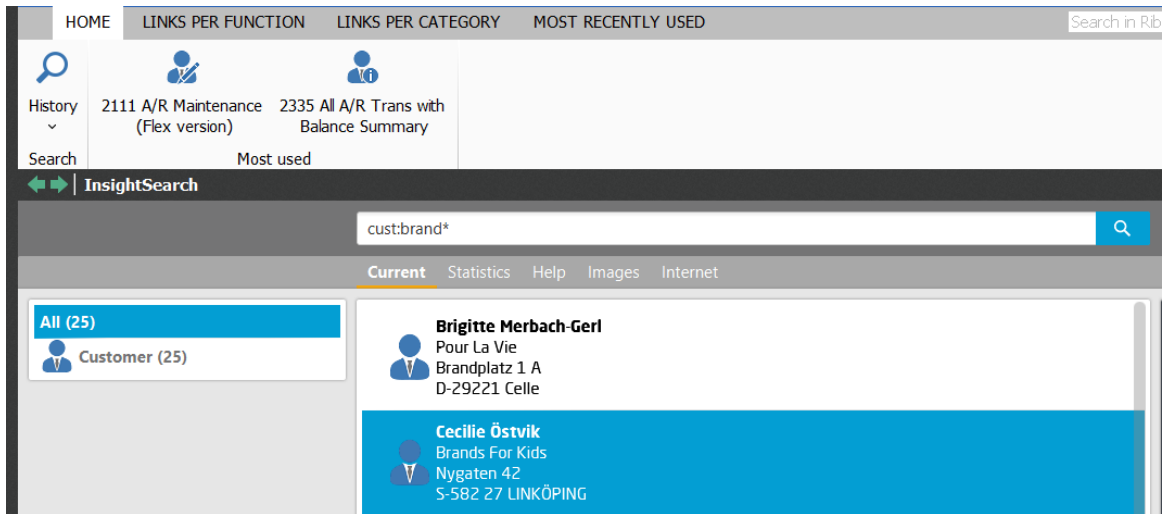
A "Help" tab is also included. On this tab, you can search all Help descriptions in ASPECT4. The "Images" tab can be used for searching in the general ASPECT4 image concept that was launched in connection with Release 4.

If you click the "Internet" tab, and internet search will be performed using Google.

3.1.1 Access rights in Insight Search

The introduction of Insight Search does not mean that users can see data that they previously were not allowed to see. Users can only search within the data that they already have access to. The rule is, that if a user does not have access to at least one Stepping Stone link on the business object, these data are not displayed in the search. For example, if payroll data are protected using security lists or another protection method, the users will not be able to see or search these data. If the normal security rules are not sufficient, the setup for Insight Search contains additional options for limiting user access on object/user/role level. Contact your EG consultant if you need this.

The same applies if your company has data in your own tables. This might be additional customer information or an employee administration system. These types of external databases can also be included in the search. This is done by making queries with an associated alias. Contact you EG consultant if you want to include your own databases in the search.

3.1.2 Technical issues

The technique that we use for this, is called Omnifind. This a text search that is very efficient for large amounts of data.

The rules for Insight Search are set up in the application "ABI" (0060), a new administration application for ASPECT4 Business Integrator (ABI). For more details, see 3.3. In ABI, you create a search setup. You have to create a setup for all business objects that you want to be able to search for.

If you need extra security, e.g. if the users are only allowed to see their own customers' orders, you have to develop a special program which is attached to the entity. You attach the program in the application "Additional key information" (0168).

The search is performed using a search index. The search index is kept up to date using the database triggers in the ABI, and the Omnifind server updates its search index periodically on the basis of this.

For Insight Search to work, a new text server has to be running in the subsystem QSYSWRK. EG ensures that a TEST server and a PROD server are automatically created.

The application "Environment setup in ASPECT4" (0108) has been expanded with two new parameters "Text server, help" and "Text server, alias". For standard installations with a test environment and a production environment, the default values will be sufficient. However, for servers with several customer prefixes (e.g. hotel solutions), it might be an advantage to include the customer prefix as a parameter value.

3.1.3 Backup

Insight Search uses data outside EGDTA. This means that the backup has to be extended with the following commands:

SAV OBJ('/QOpenSys/QIBM/ProdData/TextSearch/server1/*.*')
SAVOBJ OBJ(QDBTS* SYSTXT*) LIB(QSYS2)

3.2 Infoboards

Infoboards are another of the major new developments for Release 5. Infoboards let you display key figures for important business objects using "attractive" infographics. They offer an efficient and easily accessible overview whenever you are in contact with the business object, since Infoboards are based on the Stepping Stone technology. In addition, infoboards play an important part in the display of search results in Insight Search.

Infoboards are supported both in ASPECT4 Client and in CrossPad (as well as web solutions).


An Infoboard is a type of information board consisting of one or more graphic elements called *infographics elements*. The example above consists of three different infographics elements. An infographic is based on a template called an infographics element type. With Release 5 we deliver 10 infographics element types,

and the number of available types will increase in the coming releases. Part of the definition of an in-fographics element is the link to *infographics data*. The infographics data contain the definition of how to find a key figure – i.e. the path to the data.

With Release 5 we deliver a number of standard infoboards, infographics elements and infographics data access definitions. You can customize these standard infoboards and create your own infoboards, including infographics elements and infographics data access definitions.

3.2.1   Use in ASPECT4 Client

You can display infoboards several places in ASPECT4 Client. In connection with Insight Search, infoboards are an important part of the presentation of the search results, as shown below:
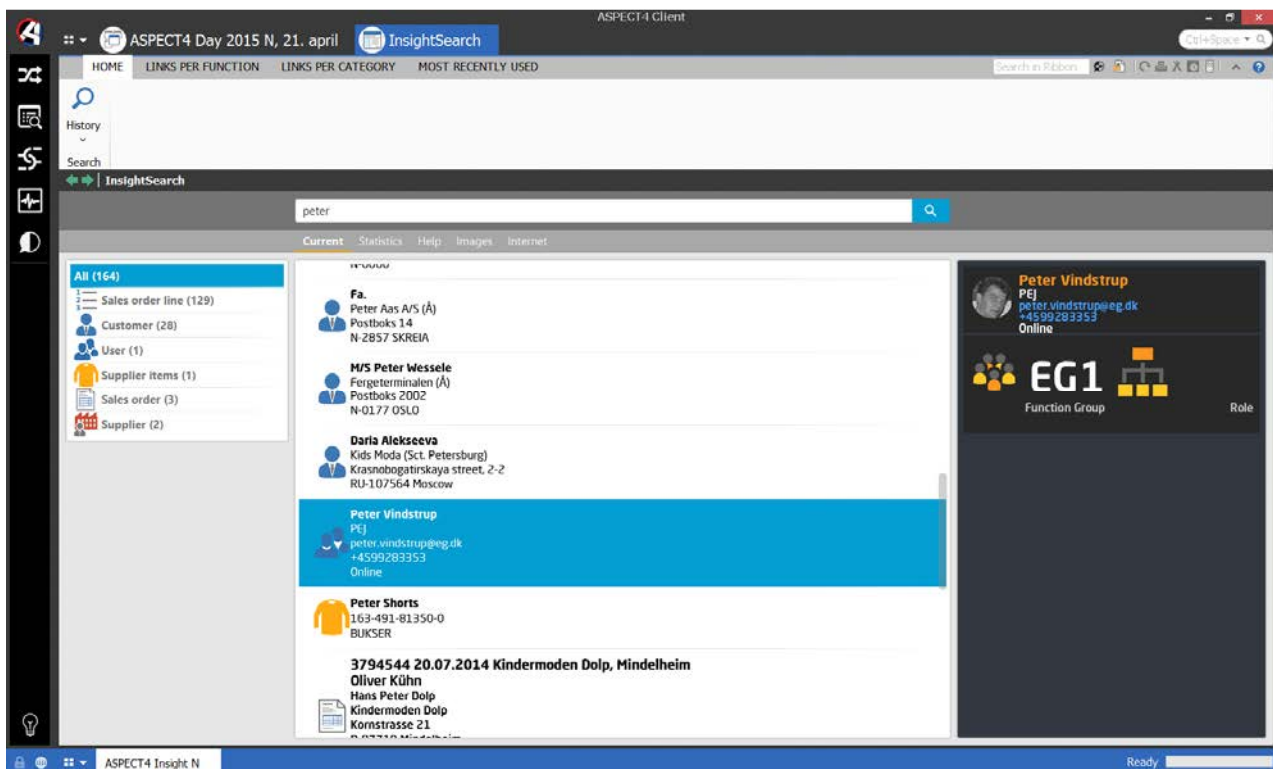
Infoboards are also available from the individual applications in ASPECT4 Client. Whenever infoboards are available in an application context, the Infoboard icon appears in the ASPECT4 Clients ribbon.
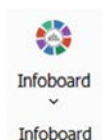
The icon enables you to display the individual infoboards. The Infoboard icon is also displayed to the right of individual entry fields that have infoboards available. If you activate display of an infoboard that is associated with business objects shown in a table, the displayed infoboard will be embedded in the table:
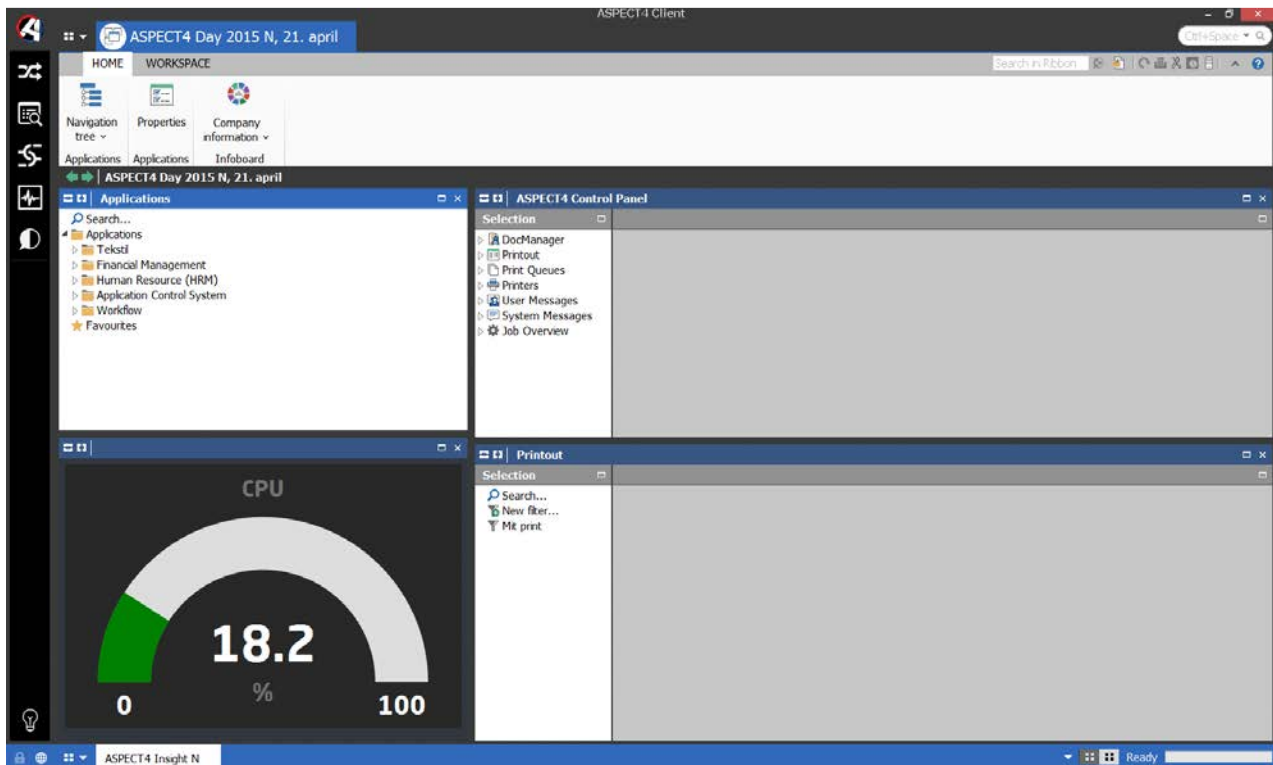

The individual infographics elements in an infoboard may include links. The links may be Stepping Stone links or URL links. It is also possible to link to e-mail and phone applications on the individual PC. This means that a click on the e-mail address in the example above, will automatically initiate the sending of an e-mail using the associated application on the PC.

Infoboards can also be displayed in the workspace in ASPECT4 Client. All you have to do, is to insert the infoboard plugin (0X28) in your workspace:
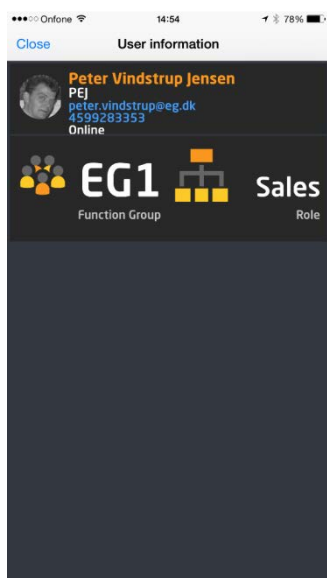
3.2.2 Use in CrossPad

You display infoboards in CrossPad using the new sidebar. When you press the infoboard icon in the sidebar, a list of available infoboards for the current context are displayed. (For more details about the sidebar in CrossPad, see section 4.1.) Select the desired infoboard on the list, which is then displayed:

3.2.3 Definition of infoboards

Everything concerning infoboards is defined in the application "Infoboards" (0162). Here you create and maintain infoboards, infographics elements and infographics data. You also use this application to set up which infoboard should be displayed in a given context. You have a number of options for customizing the use of infoboards. Which infoboard is displayed in a given context, can be set up per device type, system number, application, group, company, warehouse, role and user.

For more details about infoboards, see the application description for the application "Infoboards" (0162).

3.3 ASPECT4 Business Integrator

As mentioned previously, ASPECT4 Business Integrator is a direct extension of the general concept for data import/export, i.e. ASPECT4 Business Connector. ABI is a tool for data synchronisation between ASPECT4 components or between ASPECT4 components and external components, and focuses on data export.

Among the many functions of the ABI, you find many new and modernised replacements for the existing database trigger and data history concepts.

The reason for making these changes is primarily a wish for having new options in connection with triggers, and that the existing programs related to triggers, were becoming outdated.

In connection with the installation of Release 5, an automatic conversion will take place from the existing to the new ABI. This means that the applications "Work with multitriggers" (172) and "Work with data history" (173) are discontinued and will be replaced by the application "ABI" (0060).

The data history for General files and virktbl (in the Logistics system) is now logged in the AS4TRHT1 table, which is located in the data history library.

For more details about the new functions and options in ABI, see section 4.10.

4 New developments within existing areas

4.1 CrossPad – general news

With Release 5 an new and extended version of the CrossPad app is also introduced. It contains a large number of new developments, and the most important ones are described in the following sections.

When you start the new CrossPad app, the first thing you notice is that the app has had a facelift. The facelift makes the app match the latest versions of the mobile operating systems for iOS and Android. CrossPad now also supports bigger screens on the mobile devices.

4.1.1 Log on with Touch ID

If you have an iOS device that supports Touch ID, you can now also use this when you log in to CrossPad. If you have specified in the CrossPad settings that you want to log in using Touch ID, the login screen will look like this when you start the CrossPad app:
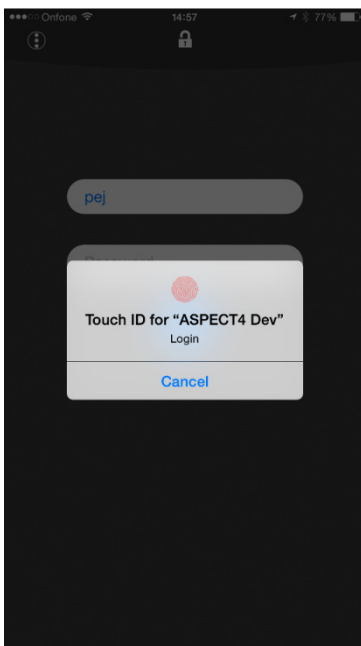

4.1.2 Sidebar

The CrossPad app now has a context-sensitive navigation bar. The sidebar is displayed by pressing and holding your finger on the screen until the sidebar slides into the screen from the left:
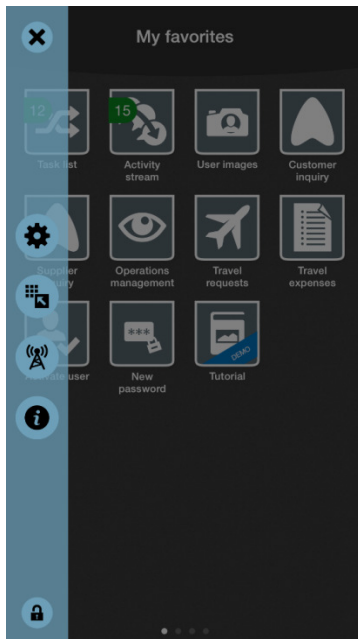
Which buttons are displayed on the sidebar, depend on the context. If you are on the front page of the CrossPad app as shown above, the sidebar contains buttons for access to the app settings. One of the new setup options is that you can customize the contents on the CrossPad front page. The individual microapps can be moved between the individual pages of on the front page, the microapps can be hidden, and the individual pages can be given a headline:
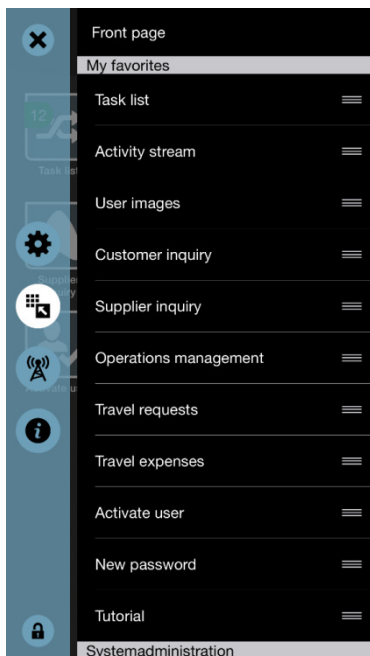
However, if you are within a CrossPad microapp, the sidebar will, among others, contain buttons for access to infoboards and Stepping Stone links and for microapp switching.

4.1.3   Stepping Stone

A very important extension to the CrossPad platform in Release 5, is the introduction of the Stepping Stone technology, known from the ASPECT4 Client, on mobile devices. This makes it possible to perform cross-functions between microapps. For example, if you are in a screen showing information about a customer in a microapp, you can jump to another customer-based screen in another microapp using a Stepping Stone link.

You activate the options for using Stepping Stone links in a given context from the sidebar. This can be done both from an individual element in a list and from a screen with several fields.

QueryManager also lets you create your own extensions to microapps, since QueryManager-based Cross-Pad apps can also be equipped with Stepping Stone links.

4.1.4   Infoboards

The new Release 5 is also supported on the CrossPad platform. Also in this area, the Stepping Stone tech-nology plays an important part, since the available infoboards in a given context are determined by Step-ping Stone information. Infoboards can be accessed from the sidebar, and you can see an example of an infoboard on the CrossPad platform in the general section on Infoboards.

4.1.5   Microapp switching

Microapp switching is in line with the Stepping Stone technology – a technology that enables a much more efficient navigation and use. Microapp switching lets you switch between running microapps. If you are performing a task in one microapp and need to do something in another microapp, you can switch to the CrossPad front page without closing the microapp that you are in. From the CrossPad front page, you can then start a new microapp. From this second microapp, you can again use the sidebar to switch to the first app again using microapp switching, and you will be taken to the exact same spot where you left it.

Microapp switching is currently only supported on iOS-based devices.

4.1.6   Push messages

The CrossPad platform now also supports push messages and notification counters. For example, this tech-nology has been used in the two microapps "Task list" and "Activity stream". If a new task appears, or there is a new post on a wall that you are particularly interested in, you can be notified with a push mes-sage, if you want to:
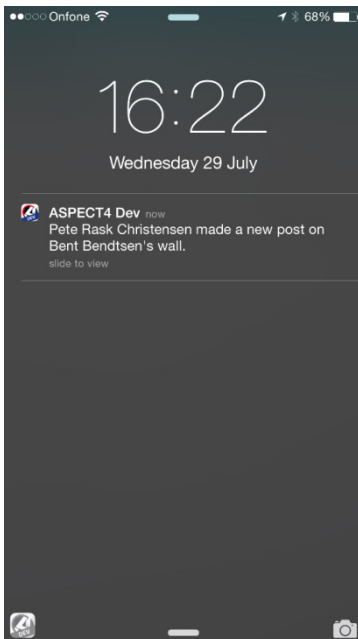
At the same time, you can activate notification counters, which means that the individual microapp icon displays information about e.g. the number of tasks that you have not yet completed.

In the CrossPad settings for the apps that support push messages, you can specify whether you want to use push messages and notification counters:
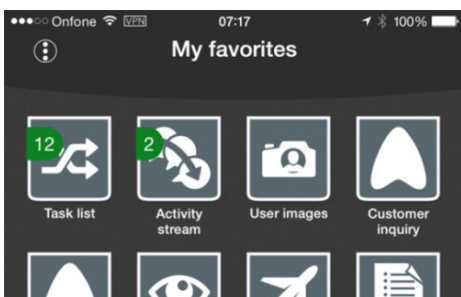
In the example above, the notification counter on the Activity stream icon shows the number of unread posts that have been added since the last time you checked your news stream.

The CrossPad app icon also has a notification counter itself, which contains the sum of notification counters for all microapps.

Whether or not you want to use push messages and numbers on icons, is specified per microapp in the CrossPad settings:
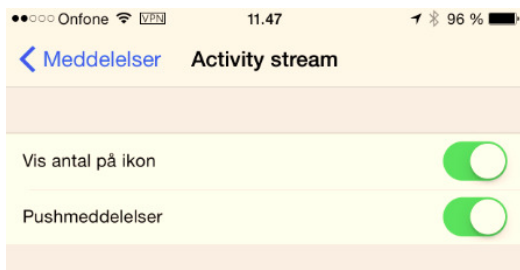
4.1.7 Beacons

The beacon technology enables mobile apps to "listen in on"/detect signals from physical devices called beacons. This way the app, and the user, can receive very accurate information based on their physical location.

From Release 5 the CrossPad app supports beacons, and beacons can be set up in the application "Beacons" (0Q21). However, the Beacon technology has not yet been put into use in any of the microapps.

4.2 Operations management

Operations management has been developed for a smartphone and enables you to get an overview of the current IBM activities. The app is designed for giving an overview when you are on the move.

The content of the first screen depends on the setup. This means that the number of items and their order can be specified per function group/user.
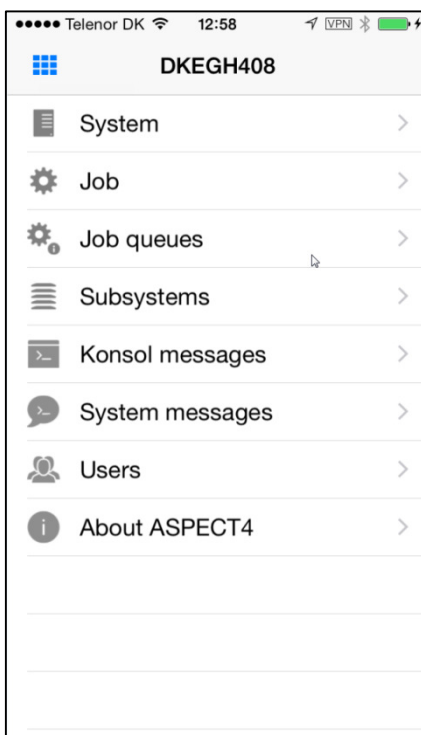
Several places in this app, you have access to filters. Filters enable users to specify which information they want to be displayed.

If the user only has access to one environment, this means that no matter which filters are created, this user will only be able to work with data from this environment.

Under System you see an overview of key figures for the system load on IBM.

Under Job you can select from a number of predefined options. A couple of options that could be highlighted, are "Top 10 CPU %", which displays up to 10 jobs with a measurable CPU percentage, and "Specific job", which provides direct access to the job filter.

After you have selected an option, a list of jobs that match the criteria, is displayed.
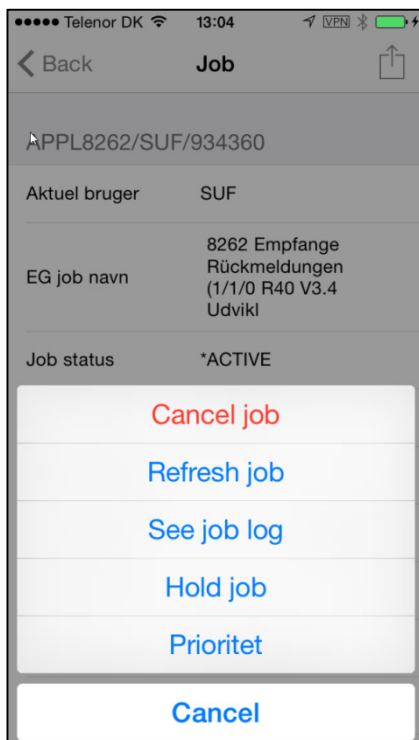
When you click a job on the list, information about the job is displayed. The button at the top can be used for displaying a list of actions that can be performed on the current job.
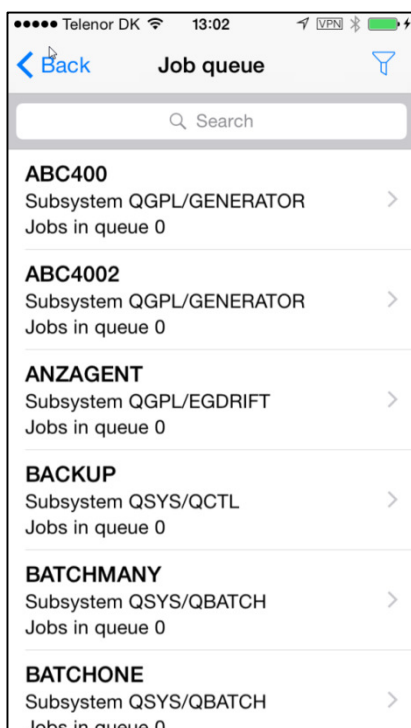
The Job queue displays a list of available job queues. The filter button at the top can be used for specifying which job queues you want to be displayed on the list.

When you click a job queue, information about the job queue is displayed. If the queue contains jobs, a click will show which jobs and give you access to working with these jobs.
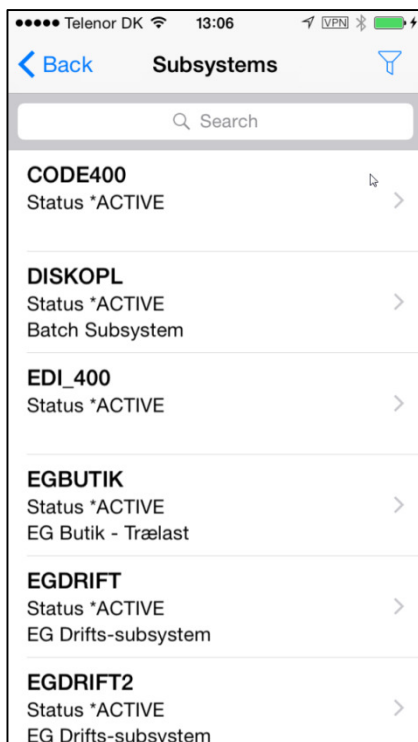
In Subsystems, the focus is on the handling of subsystems. Here you can see a list of subsystems, start/stop a subsystem and see the jobs that are active in a particular subsystem.
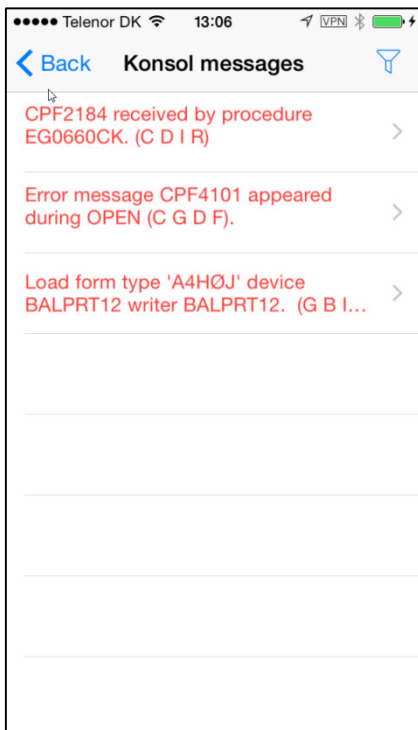
Console messages and System messages show messages from QSYSOPR and QSYSMSG, respectively.
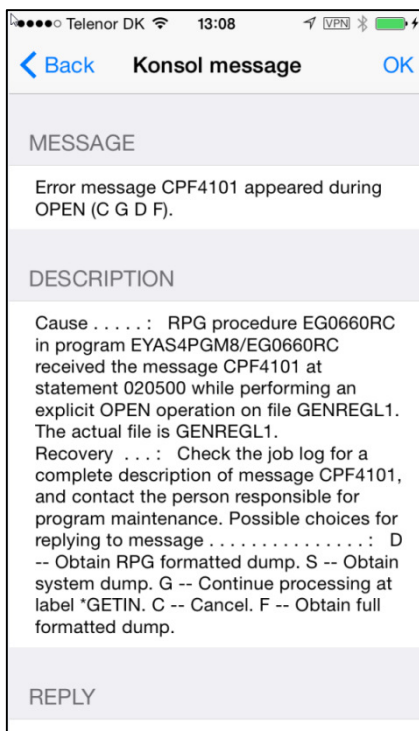
If you click a message, the text is displayed, and you can reply to the message.

Under Users you first see a list of ASPECT4 users. If you click a user, information from ASPECT4 and the user profile is displayed.

If a user is inactive, or a date is exceeded, you can change this.

●●●●● Telenor DK ⏢	13:10	⟋ VPN ⁂ ▭⚡
‹ Back	**ASPECT4**	

ABOUT ASPECT4

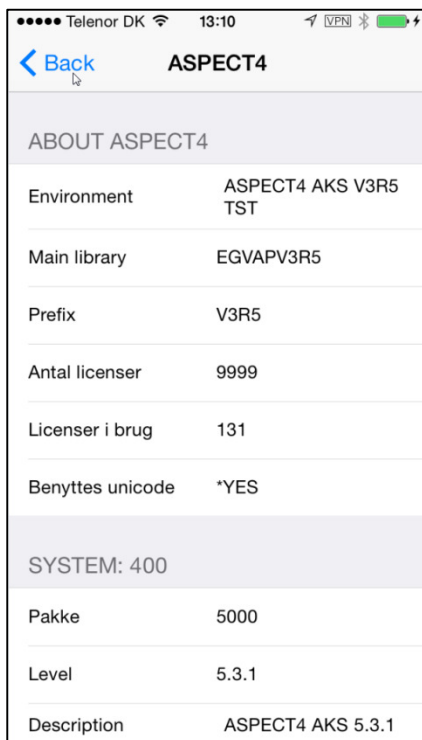| Environment	ASPECT4 AKS V3R5 TST
Main library	EGVAPV3R5
Prefix	V3R5
Antal licenser	9999
Licenser i brug	131
Benyttes unicode	*YES

SYSTEM: 400

Pakke	5000
Level	5.3.1
Description	ASPECT4 AKS 5.3.1

About ASPECT4 contains information about the environment, e.g. environment name, VAP name, number of licenses and PTF level.

4.3   Travel administration

We continue the theme of "Mobility" from Release 4, in which we made the first apps to support processes that could otherwise be heavy in terms of administration. For example, this could be processes that are difficult to perform because the user is "on the move" and consequently does not have direct access to the company IT system and data.

Two new apps have been developed to support processes for handling employee travel requests and travel reimbursements. The purpose is to enable the individual user to handle travel administration themselves and this way automate the subsequent processing in the system. The travel request can be used for pre-approval of the expected travel expenses, which means that disagreements and process reversion in connection with travel costs can be avoided later in the process.

Depending on the desired company processes in relation to the handling of travel administration, the two apps can be used together or independently.

The solution includes an approval process based on ASPECT4 Workflow Management. The information in the travel requests and travel reimbursements can also be used as the basis of transactions in ASPECT4 Financial Management and ASPECT4 HRM.

In addition, the solution includes a back office client application for processing travels including travel expenses and associated expense vouchers.

You can authorise a user to make requests and reimbursements on behalf of other people.

4.3.1   Travel requests

In this app, the user can create travel requests and see the status of the individual request. As long as the request has not been sent for approval, you can still make changes. When the status of a request changes, the user is notified with a push message, which makes it quick and easy for the user to see if the request has been approved or rejected.
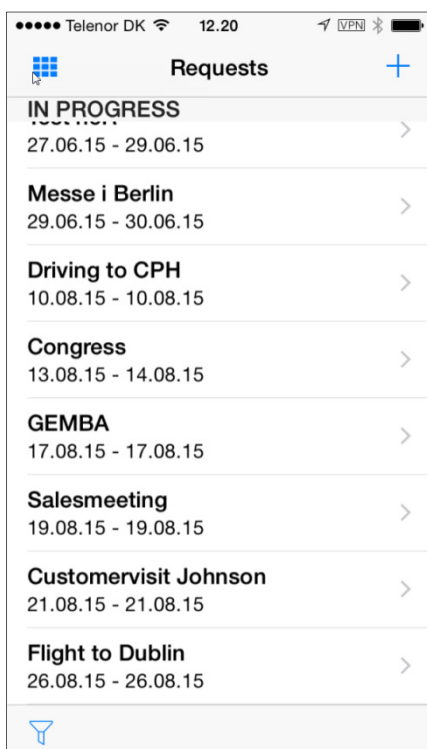
The first screen in the app shows an overview of the user's travel requests created on their own or another person's behalf, as well as requests that are not personal. By default, the "Personal" option is selected, which means that the request is only visible on the overview for the person for whom the request was created, and the person who created the request. On the posting screen, you can specify the person on whose behalf you make the request. The requests are grouped by status.

You can filter the overview. Filtering can be done on:

• From and To status
• From and To travel date
• Only show own requests.

On this screen, you create the travel request. You can specify a description, a purpose, a start date and time, and an end date and time.

For requests, travel dates and times are expected dates and times. In practice, the travel time may be earlier or later. The dates and times on the request can therefore be adjusted in connection with the travel reimbursement (see the description for Travel reimbursements). Travel dates and times can be used as the basis of a calculation of travel meal expenses.

When the user selects "Posting", this screen is displayed, in which you can specify an estimated expense, a travel type, a project and a customer. The Employee field is only visible if the user is authorised for creating requests on behalf of others.

The buttons at the bottom of the request creation screen have the following functions:

Copy request
When you have created a travel request, you can copy it as a new request.
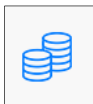
Other orders
On this screen, you can specify other orders, e.g. currency, car rental, etc.
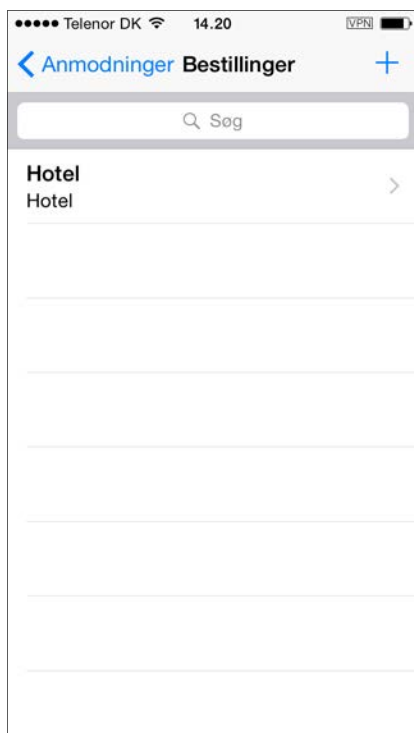
Travel points

Here you can indicate the desired travel plan as additional information to be used when booking the travel.

This is an overview of travel requests sorted in ascending order based on the start date and time.

	Send for approval
✓	This button sends the request for approval.

	Approval information
(i)	This button displays information about who approved the request, and the date and time of the approval.

4.3.2   *Travel reimbursements*

In this app, the user can create travel reimbursements and see the status of the individual reimbursement. As long as the reimbursement has not been sent for approval, you can still make changes. When the status of a reimbursement changes, the user is notified with a push message.

The first screen in the app shows an overview of the user's reimbursements created on their own or another person's behalf. The reimbursements are grouped by status. You can filter the overview. Filtering can be done on:

- From and To status
- From and To travel date
- Only show own requests.

Next to each reimbursement, you can see the number of approved expense vouchers in relation to the total number of expense vouchers on the reimbursement. The overview also indicates the total amount of the reimbursement.

When you press, + at the top, a new travel reimbursement is created. You can specify a description, a purpose, a start date and time, and an end date and time. The screen is identical to the one used for creation of travel requests.

When the user selects "Posting", a screen is displayed, in which you can specify a travel type, a project and a customer. The Employee field is only visible if the user is authorised for creating requests on behalf of others. The screen is identical to the one used for posting of travel requests.

The approved travel request forms the basis of the subsequent travel reimbursement. However, travel reimbursements can also be created without an associated travel request.

The buttons at the bottom of the reimbursement creation screen have the following functions:

	Copy reimbursement
	When you have created a travel reimbursement, you can copy it as a new reimbursement.

	Other orders
	This button is only available if the travel reimbursement is created on the basis of a travel request. You can see the other orders made in connection with the request, e.g. currency, car rental, etc. The screen is identical to the one used for travel requests.

	Travel points
	This button is only available if the travel reimbursement is created on the basis of a travel request. Here the desired travel plan is displayed. The screen is identical to the one used for travel requests.

	Send for approval
	This button sends the travel reimbursement for approval.

	Approval information
	This button displays information about who approved the reimbursement, and the date and time of the approval.

	Expenses
	This screen lets you create expenses for the reimbursement.

You specify the expense type, date, payment method, amount and currency and indicate whether the expense should be attached to the customer specified under Posting. In addition, you can take a photo of the expense voucher and attach this photo to the reimbursement.

4.3.3   Application for approval of expenses

A new client application has been created for travel administration. The purpose of the application is back office processing of travels, including the expenses related to the travel as well as the vouchers belonging to the individual expense. This is also the application used for approval of travel expenses.

The application "Travels and travel expenses" (0770) has been created as a cockpit application with a list of travels. Here you can see and maintain the expenses related to the travel as well as the vouchers attached to the individual travel expense.

4.4   ASPECT4 Activity Streams

ASPECT4 Activity Streams were launched in Release 4. This gave the organisation new possibilities for keeping themselves up-to-date with selected events and news, which are either created manually by colleagues or automatically by ASPECT4.

In Release 5, a number of extensions for the use of ASPECT4 Activity Streams have been added in order to make it even easier to manage subscriptions and add system posts to walls. In addition, the guides are now more easily accessible.

4.4.1   System posts

Events in ASPECT4 may be used for "triggering" and creating system-related news posts – so-called system posts as opposed to manual posts.

Creating a system post in Activity Streams, previously involved creation of a process definition in ASPECT4 Workflow Management. This is no longer necessary. From Release 5, you can simply pair events with system posts.

As a new step in the process, the different types of system posts have to be registered. This is done using the application "Activity Stream system posts" (0170). The system post types also form the basis for subscription management. Afterwards, the individual system post types are simply paired with an event. This is done using "Activity Stream system posts" (0W72) or "Events" (0W16).

When the pairing between system post types and events has been performed, any triggering of the event will also trigger a system post. Events can be triggered by ABC, EEM, QueryManager, database triggers (now through ABI) and manually.

4.4.2   Subscriptions management

The options for managing subscriptions have been expanded considerably in Release 5. Previously, subscriptions were personal and for single, specific walls.

With Release 5, subscriptions can be both personal and on role level. In addition, subscriptions can be more broadly defined. You can now subscribe to all walls of a given type, and you can also subscribe to system post types.

When you are in a news feed, you can easily adjust your subscriptions. This is done using these new icons:


1. Who can be followed
2. Maintenance of subscriptions (my own)
3. Who can be followed for the role
4. Maintenance of subscriptions (for roles).

Whether or not the individual user can manage subscriptions, is controlled by authorisation in the application "ASPECT4 Client" (0X00).

4.4.3   Notifications

When you create a subscription in Activity Streams, Release 5 includes an option for specifying if and how you want to be notified about new posts on the wall:
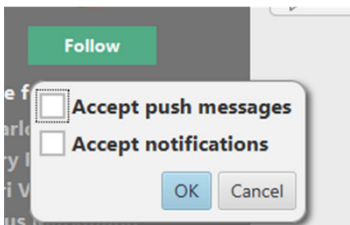
This means that in ASPECT4 Client you can receive notifications about posts through the shortcut bar, and in the CrossPad version you can receive push messages to notify you about posts:
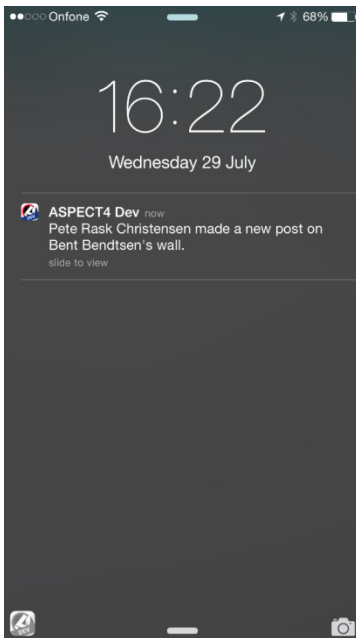
In both cases, you can also display a notification counter on the Activity stream icon that specifies how many news items you have not yet read:
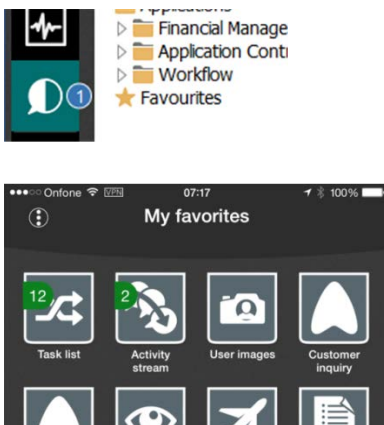
4.4.4 Guides

Video guides have been created for the daily use of ASPECT4 Activity Streams for both ASPECT4 Client and for mobile devices. You can call these from the Help for ASPECT4 Activity Streams.

In addition, a guide for subscription management has been created in ASPECT4 Activity Streams.

4.5 ASPECT4 Client

4.5.1 Column sets

To get a better overview in large tables with a large amount of data, you can now customize the screen. It can be a major advantage to display only the columns that are relevant in a specific work situation, as well as change the column order. Previously, it was only possible to create one table setup per application.

From Release 5, it is possible to design several different column sets (versions) of the same application – and name these. Using a new icon above the table, the user can quickly switch to another layout.

For example, it might be relevant for the user to see only the most frequently used columns in the basic setup for daily use and then switch to another column set with other sections of the table when required. In the example below, one column set has been created for daily use and another one for balancing.

The "Column set" icon above the table lets the user switch to the "design" that is most appropriate for the current work situation. Example:

If you work with tables that let you enter values in one or more columns, you can also use this functionality to create different versions of the application – one with editable columns and another with read-only versions of the same columns.

The next time the user enters an application, the same column set is displayed as the one that was used the last time the user worked in this application.

Column sets are created/changed using the "Table properties" icon found on the "TABLE" tab if the user has access to this icon.

New column sets are created either by clicking the "Create" button at the bottom of the screen, giving it a descriptive name, adjusting the column set properties and then clicking "Save"; or by first adjusting the column set properties and then clicking "Save as":

If other users should also benefit from the new column sets, the system administrator can copy/move the setup to other users, layout groups, function groups, company numbers or group numbers, or make it the company default. This is done in the application "Layout administrator" (0X03). In the Type column, you can see which records have been made in "Table properties".

The default column set created by EG, cannot be changed.

4.5.2   Split view

Another way of creating an overview in tables is to make one or more split views that contain the relevant columns. In addition, you can now group the columns that are logically related, and display the content with a descriptive headline. This can be a major advantage, especially for tables with many columns.

When you have created one or more split views, the names of these will appear on the ribbon at the top. When you select one of these, the columns that belong to the selected split view, are displayed. The table is split up in two areas. In the area to the right, the grouped columns are displayed.

The spilt views are created in a similar way to column sets, by selecting "Table properties" on the "TABLE" tab. Here you find a new column called "Group". In this field, you specify for each column which group it should belong to. New groups are created by clicking "Groups" at the bottom. Click "Insert", and name the new group. If you want to create another group, click "Insert" again:

When the groups have been created, you can select the relevant group in the Group field next to each column:

Finally, click "Save as", and give the split view a descriptive name:

4.5.3   Pivot

In all tables, users with access to the Pivot icon can click it to build up the screen as they want it.

Many customers have expressed a wish to be able to save the individual pivot with a name, so it can be reused later. This wish has been fulfilled in Release 5. When the table has focus, you can select one of the already defined pivots by clicking the "Pivot" icon on the ribbon on the "TABLE" tab or by using the keyboard shortcut Alt+R+T+P). Example:
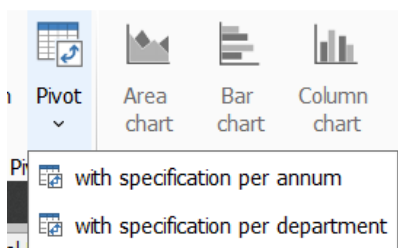
4.5.4   Display the field value for a tab

If a user has many open tabs, it may be slightly difficult to find the tab with a specific customer, order, employee, etc.

This has been solved in Release 5 by displaying the customer number/name, the order number or similar additional information when the user presses the Alt key to use a keyboard shortcut to jump to another open tab.

In this example, we have chosen to add the label in front of the field value. This is not a requirement. Other fields could have been chosen instead.

The open tabs are also displayed on the list of tabs. In this list, the field values are also displayed next to the individual tab:

If you choose Quick Search, the field values will also be displayed next to the running applications:
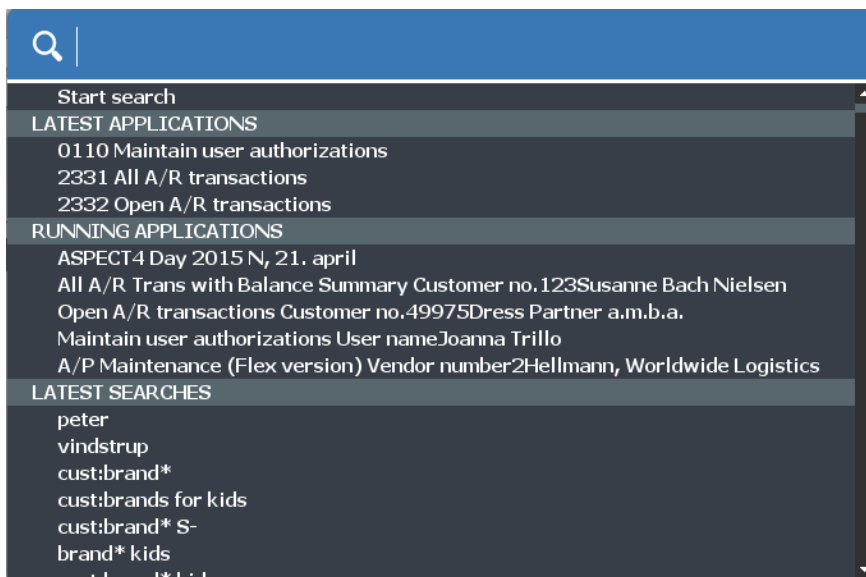
Since the requirements of individual users will vary considerably within this area, EG does not deliver a default setup. It is up to the individual customer to decide in which applications this is relevant, and what exactly should be displayed.

The setup is created in the layout designer, which means that you need access to this tool to create the setup. Click the field that you want to display on the tab, and mark the check box next to "Show on tab".

Repeat this for all fields that you want to be displayed.

If other users should also benefit from the same setup, the system administrator can copy the setup in the application "Layout Administrator" (0X03). (The type is called "Show on tab".)

Contact your EG consultant if you need help for making this setup.

4.5.5   Move tab

If you decide to auto-start the applications that you use on an everyday basis, the application tabs will always have the same position. Many users like this, since it means that they can always use the same keyboard shortcut for jumping to a specific tab.

If the user accidentally closes one of the tabs, this might mean that they have to use other keyboard shortcuts to jump between the open tabs. This problem is solved with the introduction of the Move tab functionality. The user can restart the application, and then drag the tab to its usual position.

In the example below, the tab "Master data" is moved to a position between "All A/R trans with balance summary" and "Open A/R transactions":
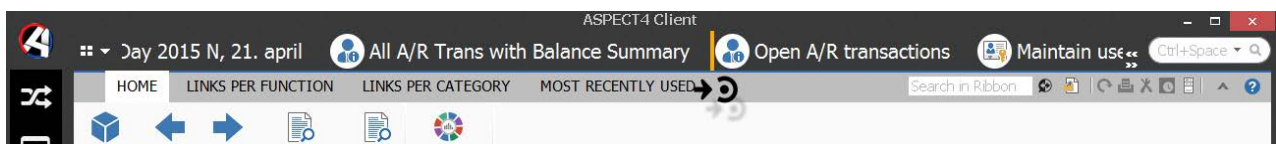
If a Prohibited cursor is displayed, the tab cannot be dropped here. If the above curser is displayed, the position is valid. When the tab has been moved, the usual keyboard shortcuts with Alt+tab number can be used again.

4.5.6 Detach tab

Especially users who work with two computer screens, will benefit from the new possibility of detaching a tab from the client to place it e.g. on a different screen. For example, this type of detached tab can be used if you do not want to jump between tabs, but instead use one tab for data entry and another tab for data lookup, or if you want to compare the contents of two tabs.

To detach a tab, you simply drag the tab headline out of the client and drop it on e.g. an external screen. If a Prohibited cursor is displayed, the tab cannot be dropped here.
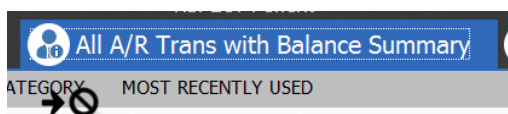
If the same cursor is displayed as the one shown for "Move tab" above, it means that the tab can be dropped here and will be detached from the client.

When a tab is detached, it may look like this:
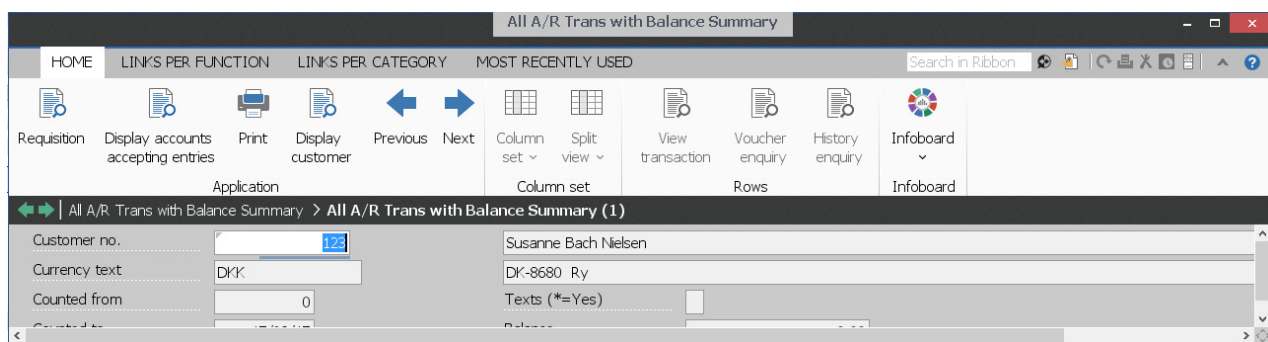
4.5.7 Search field on the ribbon

Often the ribbon at the top of the screen contains a number of links to other applications. These are grouped under the LINKS PER FUNCTION and LINKS PER CATEGORY tabs, which are not displayed when you enter the application. To make it easier to find a specific application, EG has implemented a search function similar to the one that Microsoft provides in Office.

The search is performed in the same way as you know it from e.g. Google. This means that as soon as you have entered sufficient information for the client to recognize one or more applications, the ones that match the criteria, will be displayed. In the example below, three applications are displayed already when the letters "cus" have been entered:
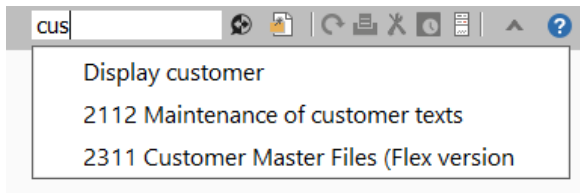
You can then use the arrow keys to navigate to the desired application and start it by clicking the line. In the permissions for the 0X00 application, you can turn off "Search on ribbon", if you do not want to use this functionality.

4.5.8   Reuse active applications

If a user wants to start an application, and the user has already started the same application on another tab, the user will be asked: "Do you want to start a new copy of ...". Example:
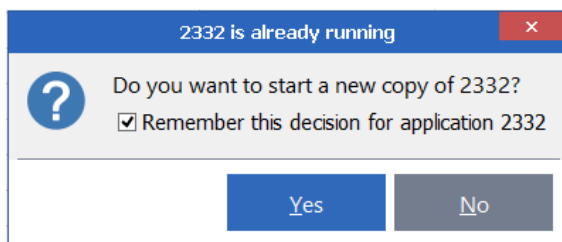
If the answer is Yes, a new tab is opened with the application in question. If the answer is No, the user will be taken to the application already running to continue their work here.

By default, the user's choice will be remembered (for the application in question). If you do not want the decision to be remembered, remove the check mark in "Remember this decision for …". If the user later regrets the choice for this application, it can easily be changed by right-clicking the tab name and adding/removing the check mark next to "Reuse tab":
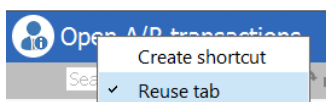
4.5.9 Settings under the capital A have been moved

Under the capital A in the top left corner, the individual user can control various settings, e.g. if the tabs display application numbers or texts, if the Latest User ID or the Windows User ID is used for sign-on, etc.

If the default values do not match the wishes of the individual company, all users previously had to change these parameters on their own PC.

In Release 5, we have chosen to improve this, so the default values for the following parameters can now be specified in the permissions for the application "ASPECT4 Client" (0X00):

1. Default Excel format
2. Default for Show function keys on buttons
3. Default user
4. Default tab text
5. Default display of links.

By default, the default values defined in the permissions by the IT department will be used. If needed, the user can then override one or more of these settings in the individual setup. Example:

However, the IT department can set up the last three parameters for central control, which means that these parameters will not be visible for the individual user in the setup.

4.5.10 Java 8

The Release 5 client is based on Java 8. This means that this version has to be installed for ASPECT4 to run in terms of graphics. EG still recommends that Java is upgraded to the latest version as soon as EG has approved this.

The Deployment page (example: http://servernavn:1045/clientX) has been updated with a Java 8 tab and other changes. EG recommends that the IT employee responsible for the system, checks this page regularly to see if there are any news regarding Java that might be relevant in relation to ASPECT4.

4.5.11 Another XML viewer

In some applications, such as the application "Open e-invoices" (0791), XML documents are displayed. Previously, EG used Internet Explorer to display these documents in a browser. In Release 5, we made a special viewer for this purpose which provides better and faster display of XML documents. In the new viewer you can save, print, search, zoom, etc. as you know it from other viewers.

4.5.12 Cockpits

Some customers have experienced that cockpits with a very large number of tabs, could be very slow when starting up and when working with the data. For example, this issue was experienced in the financial management system. The reason for this was that all tabs had to be loaded before the screen was ready for use. In Release 5, you can make tabs "lazy", which means that the content is not loaded until the user decides to click the desired tab (or call it using a keyboard shortcut).

EG ensures that the standard cockpits are optimised. Customers that have developed cockpits with many tabs themselves or have had them developed, can contact their EG consultant if they need help for changing the setup in the application "Maintain cockpit" (0127).

4.5.13 Application starter field

Applications can be started e.g. by clicking the navigator tree or a shortcut on the shortcut bar, but most often it is done by entering an application call in the application starter field in the top right corner.

In Release 5, the text "Ctrl+Space" is displayed in this field. This keyboard shortcut can be used for starting Quick Search (see the description in section 3.1).

It may take a little getting used to, but soon the user will find it much faster to start applications this way. In addition, Quick Search provides a number of other options for navigation in the system.

When you are ready to replace the application starter field with Quick Search, you can remove the field in the permissions for the application "ASPECT4 Client" (0X00).

4.5.14   Terminal servers/Citrix

On the Deployment page of ASPECT4 (from which ASPECT4 Client may be downloaded), you find a Citrix tab. This tab contains guidelines from EG on how to deploy and run ASPECT4 on terminal servers/Citrix, and these have been updated for Release 5.

4.6   QueryManager

4.6.1   External data sources

One of the major, new areas in QueryManager Release 5 is the possibility for accessing external data sources.

This is achieved by defining the external data sources, and when a query is created, you specify the data source from which the information should be extracted. Most of the possibilities that you usually have in queries, are also available in queries built on external data sources. This applies to output, requisitions, applications, functions and much more. You can even create queries that combine information from several data sources.

In addition to extracting information from external data sources, you can also transfer information to external data sources. This means that you can easily build a query that extracts information from one data source and transfers it to another data source.

The following database systems are supported as external data sources:

- ASPECT4 – if you have an ASPECT4 installation on another machine or partition
- DB2 for i – if you have an IBM i with a system that is not ASPECT4
- DB2 LUW
- Microsoft SQL Server
- MySQL.

The functionality for external data sources requires a license key for QueryManager Pro.

4.6.2   Data editing

Another of the major, new areas in QueryManager Release 5 is the possibility of editing data. This means that you can both create, change and delete data in tables that are not ASPECT4 tables.

In this connection, the "Detail view" function has been expanded to also include the possibility of building screens for use in ASPECT4 Client. Screens for the client can be built from both tabs and field groups for organisation of fields, and the fields can e.g. be presented as combo boxes, check boxes, F4, etc. In addition, two new types of functions have been added for creation and deletion.

In addition to building the screen, you can also specify values for the "Detail view" function that will automatically be updated with e.g. current user, date or time. This can also be specified for creation functions for which you can also specify default values for the screen.

In other words, QueryManager Release 5 lets you build a complete maintenance application, and this applies to both ASPECT4 Client and CrossPad.

The functionality for "Editing data" requires a license key for QueryManager+.

4.6.3 Performance improvements

The performance has been improved considerably when running queries, which means that you will experience a general improvement in the time it takes to run a query as well as the performance load on the system.

4.6.4 Limitations on functions

Previously, when you used functions, they were available to all users and all rows in the result. You can now set up limitations for all types of functions. This means that a function can now be made available for specific users only. This also means that it may only be possible to execute a function on rows that fulfil certain criteria.

4.6.5 E-mail output

A new output makes it possible to create e-mails based on the query result. You can either choose to send an e-mail for every row in the result, or you can send one e-mail for the entire result and add the e-mail addresses from the individual rows as Bcc. The subject and the content in the e-mail is specified by the us-

er, with the added possibility of inserting information from the row. This output lets you use QueryManager to produce one combined e-mail to a number of recipients found using the query. For example, you can use this for sending out information in situations when you do not want to attach the query results as file, as you do for IFS and DocManager output. This is pure text.

4.6.6   CrossPad image display

Another new output is targeted at CrossPad and makes it possible to build image displays in CrossPad apps. Instead of producing a row in a list for every row in the result, as in the output type "CrossPad list", this output displays an image for each row in the result. The images can be displayed in different ways. One option is a tiled overview, and another is a display that resembles a viewer with focus on one image at a time. For both display types you can control the display of the images and use autoplay to make the displayed images change with a specified time interval.
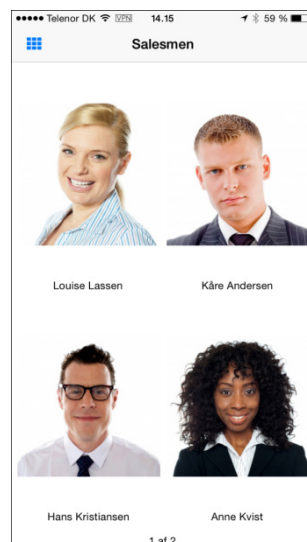
4.6.7   Expanded CrossPad options

In addition to the new output for CrossPad image display, a number of extensions have been introduced for the list output in CrossPad. Among others, you can now add a filter, which makes it possible to filter what you see on the list. In addition to calling the filter when you are in the list, you can also choose to display the filter before the list is displayed, which makes the filter work as a type of requisition. You can also search lists simply by specifying which fields to search.

In addition, you can now use tabs, which means that you can have several lists in a CrossPad app, with one list on each tab. The possibility of showing charts in a detail view has also been added.

With the introduction of Stepping Stones in CrossPad, this is also supported in CrossPad applications that run queries. For the CrossPad application you can define the Stepping Stone links that the app makes available for other apps. From QueryManager-based CrossPad apps you can, of course, also access infoboards and Stepping Stone links to other CrossPad apps.
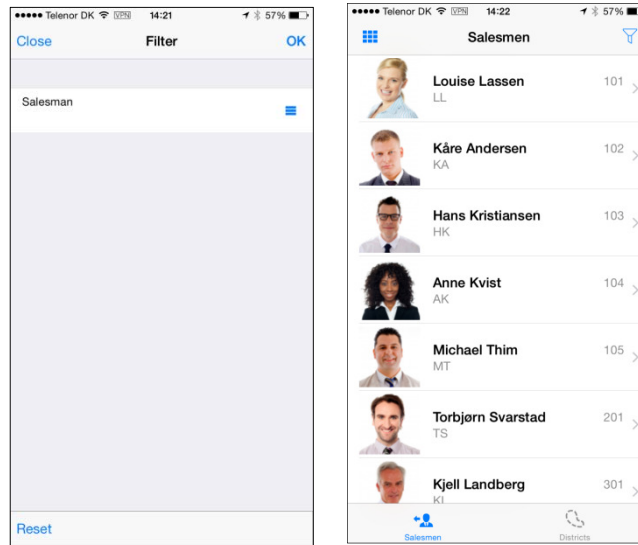
4.6.8   Dynamic texts

Using dynamic texts, you can define global texts for the query that you can refer to in other parts of the query, and a single dynamic text can be reused in several places in the query. The dynamic quality of the text is the possibility of merging values from the requisition or an SQL statement in the text. If you want to merge dates into the text, you can use any format you like.

4.6.9   Building cockpits

For some time you have been able to prepare Query applications for inclusion in a cockpit created using the applications "Maintain cockpit master information" (0126) and "Maintain cockpit" (0127). Now a tool has also been added in QueryManager that enables you to quickly and easily build a cockpit consisting of several Query applications. Simply by selecting the desired split of the cockpit and the Query applications to include in the cockpit, you can create the entire cockpit with just one click, and it will be ready to run.

4.6.10   Taking requisition values into account in actions

If a query uses other queries as its table basis, you have always been able to use a requisition for an underlying query and transfer requisition values to the underlying query. Now you also have these options for queries run as actions. The same way that you can specify an underlying requisition for an underlying query, you can now also specify a requisition for an action query, which means that the requisition for this query is included in the combined requisition. If you have actions that run commands or SQL statements, you can also refer to requisition fields in these and consequently vary the command or statement depending on the specifications in the requisition.

4.7   Workflow Management

4.7.1   Restart automatic tasks with error

From the "Tasks with error" node, you can restart automatic tasks with errors. This means that the automatic task is performed again. However, it is only relevant to try this if the external conditions have changed, e.g. if a long-lasting record lock was removed, or a fixed SQL statement was changed.
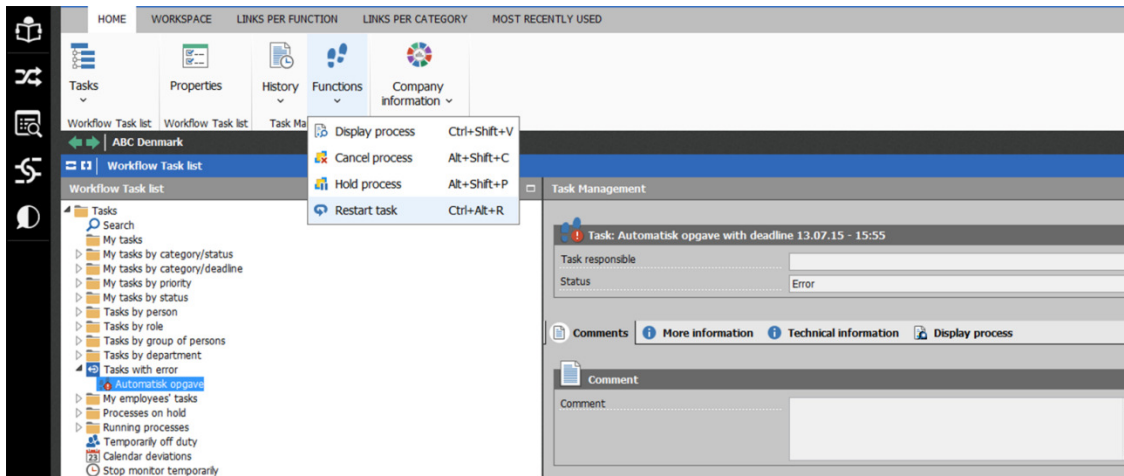
4.7.2 Autodelegation shows from whom the task was delegated

In connection with autodelegation, the history now contains information about both the task responsible person that the task was moved from, and the task responsible person that the task was moved to. Previously, you could only see the person that the task was moved to.

4.7.3 Display number of tasks and notifications on the shortcut bar

Under "Properties" in the Task list, you can now specify whether you want notification when a new task arrives, i.e. "the green lamp" is turned on. You can also specify if the number of tasks should be displayed on the workflow icon on the shortcut bar, which means that you do not have to open the task list to see if you have new tasks. By default, both notifications and the number on the workflow icon are displayed.
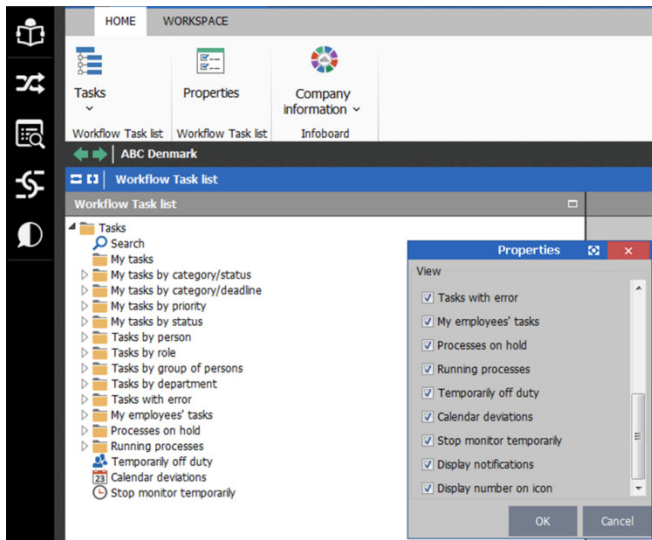
The number of tasks is displayed on the shortcut bar on the workflow icon:
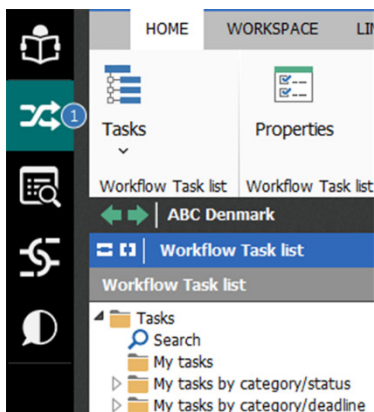
4.7.4 Display labels for fields in task processing

A label (i.e. an accompanying text for the value) can now be displayed for the individual parameters in the task list. This requires that you have defined the validation type as "SQL statement" or "Fixed SQL statement" for the parameter in the application "Parameter definitions" (0W00). In the SQL statement, you have to select the value to be displayed as the label for the parameter.
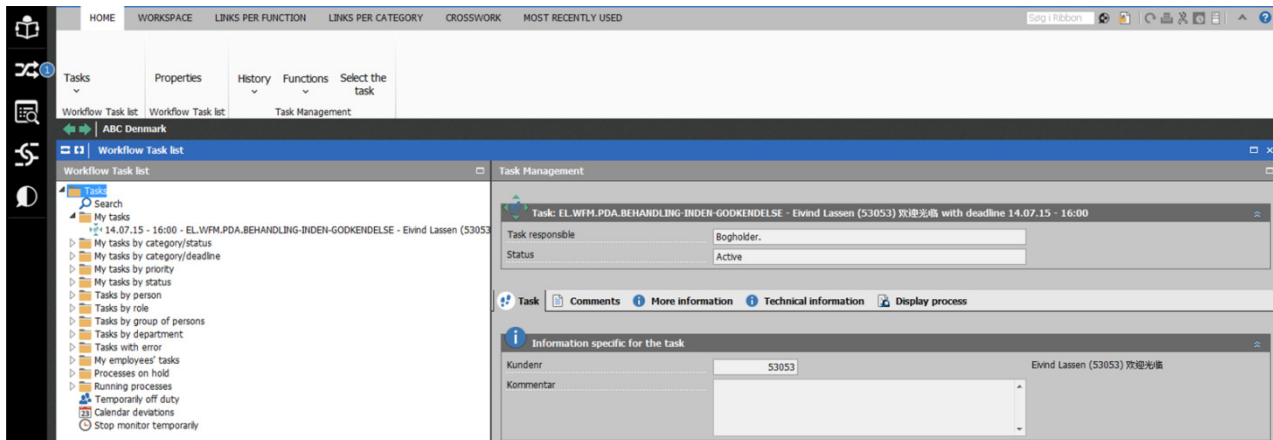
4.7.5 CrossPad

The mobile version of the task list on CrossPad now supports push messages. This means that even when you are on the move, you will be notified about new tasks. The push message can lead you directly to the task in the task list. The number displayed on the task list icon on the shortcut bar in ASPECT4 Client is also displayed on the task list icon on the CrossPad front page.

Another minor change to be mentioned is that parameters of the "string" type that are longer than 50 characters, are now displayed as a memo field in the task list in CrossPad. This makes it easier to see the contents of the parameter.

4.7.6 Other new developments

- Using pre-programmed triggers, you can now start process instances across releases and environments that do not use the same workflow server.
  If this is done across workflow main servers (MSSSJAP1), e.g. with different releases, you have to create a permission in the application "Internal allowed module calls" (0171) that allows calls from other environments. The permission is created on: From environment, EA0AWFRA module, EVENTFIRE function, '*ALL' or EDBGRP user. This information is created in the environment that you are calling.

- When you import a process definition, the file name is by default prefilled with "/aspect4/v3r5/WFM/PROCESSDEFS/<file name>.xpd", which corresponds to the structure of the path to which process definitions are exported by default. If the file name starts with the machine name, this is removed automatically. This is also the case with "/root".

- When searching for tasks, the user now needs permission to see the tasks belonging to the task responsible person in question to be able to see the tasks in the search results.
  However, if the user already has permission to see the "Running processes" tab, this permission is not necessary, since the user can see the tasks here.

- You can now create "Wait for" conditions for both manual and automatic tasks (previously this was not possible for automatic tasks).

4.8 ASPECT4 Business Connector

4.8.1 The receipt log

Every time a call is made to the application "Manage flat files" (0654), information about the call and its result are now saved in a new table. Many have expressed a wish for this, since it can be difficult to see if anything happens when you call the application 0654. A message is sent by e-mail (EEM) when an error occurs, but it may easily get lost in a long list of e-mails. From ABC operation you can now see all calls to e.g. an FTP server through an ABC profile, and this way you also have a history available for calls to FTP servers.

	Profil	Filstatus	Statustekst	Fil id	Oprettet d.	Oprettet kl.	Oprettet af
1	TEST-SPLIT-VARDI	59 Fejlbehæftet	Filen: /aspect4/v3r5/files/ckj/test/in/split-fil.csv er låst (holdt af andet system)		19-03-15	11:01:00	CKJ
2	TEST-SPLIT-VARDI	80 Afsluttet ok	Filen: /aspect4/v3r5/files/ckj/test/in/split-fil.csv er behandlet		19-03-15	10:41:44	CKJ
3	BUDGET	80 Afsluttet ok	Filen: /aspect4/v3r5/Inbox/logistik/budget4711.csv er behandlet		06-03-15	11:51:18	PRO
4	BUDGET	59 Fejlbehæftet	Der findes ingen filer i stien: /aspect4/v3r5/Inbox/logistik med følgende maske: budget*.*		06-03-15	11:31:33	PRO
5	TEST-SPLIT-VARDI	80 Afsluttet ok	Filen: /aspect4/v3r5/files/ckj/test/in/split-fil.csv er behandlet		26-02-15	13:31:52	CKJ
6	TEST-SPLIT-VARDI	59 Fejlbehæftet	Der findes ingen filer i stien: /aspect4/v3r5/files/ckj/test/in med følgende maske: *.csv		26-02-15	13:29:05	CKJ
7	TEST-SPLIT-VARDI	59 Fejlbehæftet	Fil: /aspect4/v3r5/files/ckj/test/in/split-fil.csv kunne ikke kopieres da filen allerede findes i folderen: /aspect4/v3r5/files/ckj/test/split-fil.csv		26-02-15	13:28:19	CKJ
8	TEST-SPLIT-VARDI	59 Fejlbehæftet	Der findes ingen filer i stien: /aspect4/v3r5/files/ckj/test/in med følgende maske: *.csv		26-02-15	13:24:29	CKJ

4.8.2 Logging status changes in ABC operation

When a user executes a function in ABC operation that changes the status of e.g. a document, this will now be logged in a new table. For example, it could be a restart of a document or completion of a failed document. This gives you a quick overview of changes made in ABC operation.

4.8.3 Overview of ABC documents

The longer you use ABC, the more ABC document setups you create. To create a better overview, it is now possible to group your documents. This means that a number of group headings are now displayed, e.g. orders, invoices and bookings. If you expand the group, e.g. orders, the list of documents belonging to this group, is displayed.

4.8.4 Rights in ABC

A reorganisation of the rights in the ABC application has been performed. Now you can control rights the usual way using the application "Maintain authorisations" (110). You do this on the levels: partner, ABC documents, conversion table and system information. You can specify the rights to change, create or display. You can also specify if a specific person is only allowed to see a group of documents.

4.8.5   Performance improvement

For large amounts of data, ABC operation could previously be a little slow to work with. This has now been optimised by making changes in ABC operation and in the creation of new tables.

4.8.6   Document connections (data flow) in ABC operation

A document can now be followed from start to end. When you are on an ABC document, you can use the "Inbound document" option to see how the document was received. In case of EDIFACT, you see the EDI document and can follow the trace further on to the EDIFACT despatch. In the same way you can use the "Outbound document" to see where the document were delivered.

4.8.7   Files saved in clob/blob tables instead of the IFS

When ABC was originally developed, the natural choice was to save XML files on the IFS in what we call the ABC container. In later versions of IBM, tables have developed in a number of ways, and today a table can contain an XML file in a column of the type "clob". Clob is short for "Character Large Object", and this column type can contain up to 2 GB data. A clob is treated as a column in a table in the same way as e.g. numerical or alphanumerical columns.

Import/export of files that you want to archive, are saved in a table with a blob column. Blob is short for "Binary Large Object", and this column type has been selected for import/export of files, since it should be possible to save all types of IFS files, such as PDF and TIF files.

The advantages of this new way of saving XML files and despatch/receipt files are:

- Optimisation of mirroring (some customers had experienced a delay of several hours for XML files)
- Optimisation of backup time
- Optimisation of security data backup
- Minimisation of the number of objects in the IFS
- Minimisation of recreation time after a breakdown.

4.8.8   Active import/export files

After Active jobs a new branch has been added in the tree that shows Active import/export files. It shows the files that are left "hanging" in the system if, for example, they have been sent to a DocManager that is not running.

4.8.9   FTP log is saved for import/export files

When files are sent, the FTP log from the FTP server is saved as information in the import/export table. This log can be used for troubleshooting.

4.8.10   New value in column can trigger new document

For an inbound ABC profile with the file type "comma", you can now trigger the creation of a new document when a value in a column changes. For example, this can be used if a file contains several orders.

4.8.11   Copy from test to production

You can now copy the document setup to another environment. A menu item has been added when you right-click a document setup that lets you select this option.
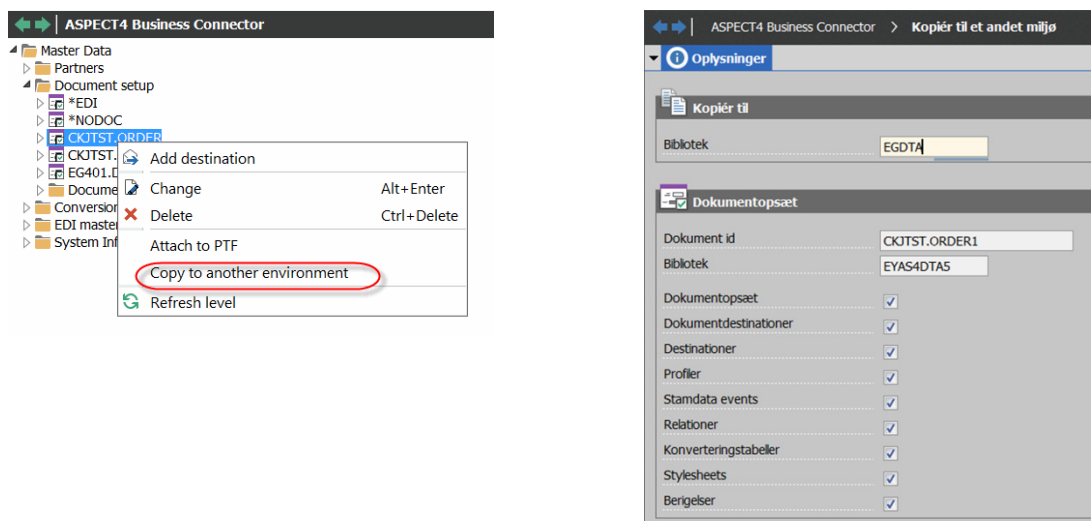
4.9   DocManager

4.9.1   QR codes

The selection of different barcode types available in DocManager, has been expanded for Release 5 with the possibility of creating the popular barcode type "QR Code". A QR code is a two-dimensional barcode type that can contain large amounts of information.

4.9.2   Use of SSL for POP3 and SMTP

The DocManager functions for sending e-mail (SMTP) and receiving e-mail (POP3) have been extended with the possibility of using SSL, which means that communication with the e-mail server can take place using an encrypted connection. When receiving e-mail, SSL is used automatically if the communication has been set up to use port 995. If you want to use SSL when sending e-mail, you have to specify this in the DocManager e-mail configuration.

4.9.3   Fall-over on the DocManager web interface

The DocManager web interface is used in situations when you want to create a "document preview" and see a document as a PDF file. The web interface is also used in other, more "hidden" contexts from ASPECT4 Business Connector, e.g. if a print should be embedded as a PDF file in an XML document.

Previously, the configuration of the DocManager web interface was based on setting up a specific DocManager instance (server and port) for handling web interface requests in General files section 0670 for each DocManager print queue. This meant that there was a one-on-one connection between a DocManager print queue and a specific DocManager instance.

In Release 5, we introduce an important extension in relation the handling of web interface requests for DocManager. Now the system itself can determine which DocManager instances are running in a given environment and automatically distribute the web interface requests between these per print queue. This way, we ensure a fall-over on the DocManager web interface, as well as an improved distribution of web interface requests.

If you want to use this new fall-over method, simply delete the configuration in General files section 0670.

4.9.4   System queue overrides

*SYSTEM is a special DocManager print queue used in several contexts for which it is not important exactly which DocManager instance runs the job. This queue is special in the way that all DocManager instances in a given environment run jobs from the *SYSTEM queue when they do not have other jobs.

In the new General files section 0659, you can create a system queue override per group/company/warehouse. If you create a system queue override for a given combination of group/company/warehouse, the DocManager jobs that should have been created for the *SYSTEM queue will instead be created in the DocManager queue that has been specified in this section.

4.9.5   Other new developments

- The *WEEKOF* function for use in DocManager calculation expressions and formulas. This function returns the week number for a given date.

- Increased compression of the PDF documents produced by DocManager.

- For the rotatable barcodes in DocManager, you can now hide the text that displays the barcode value.

4.10   ASPECT4 Business Integrator

In ASPECT4 Business Integrator some new functionality has been added for this release, and we expect to add more for the coming releases.

ASPECT4 Business Integrator covers the entire concept, whereas the user interface is referred to as ABI (application 0060).

4.10.1 The user interface

When a function is called, the screen will be organised like this:
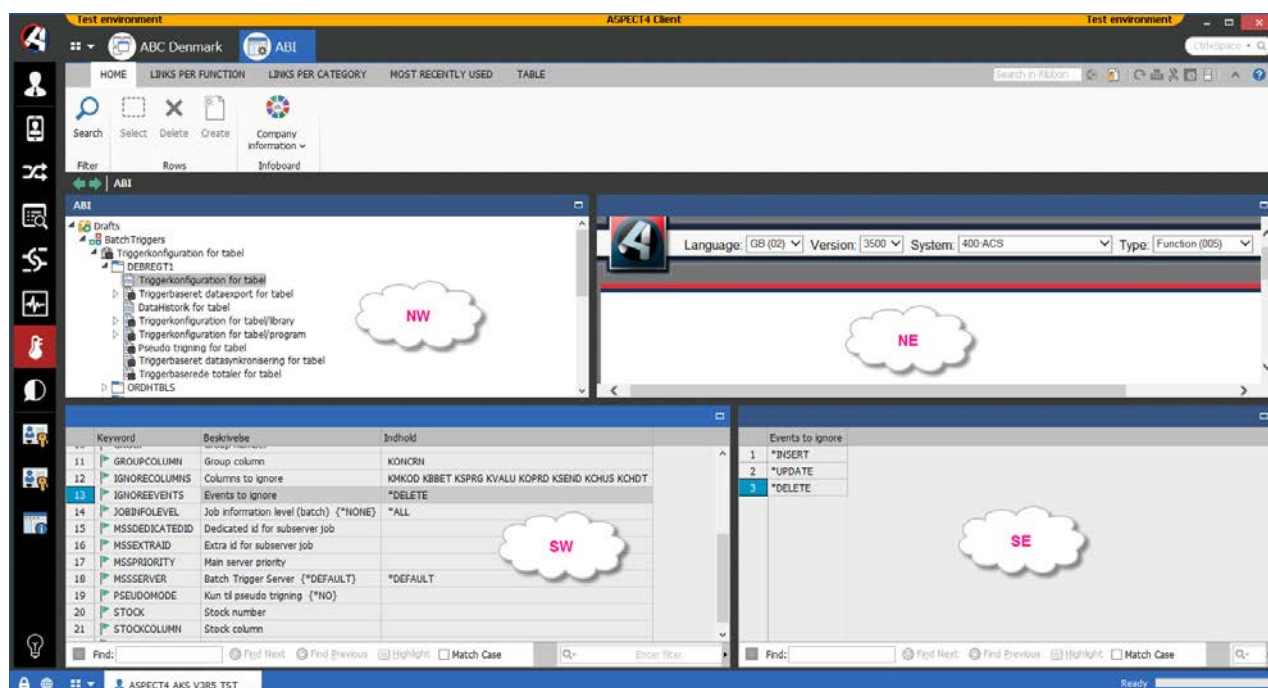
In **NW** you find the functions for execution.

In **NE** you find the user manual for the function that you are executing. It contains descriptions for the individual editable fields.

In **SW** you find the parameters for the function that you are executing. If you want to edit a field, you select it. If the field has a default value, it will be displayed in **{ }**.

In **SE** you find additional information about the field that you are editing. In some cases, the field that appears, can only be used for keyboard entry, in other cases it presents a number of choices (e.g. *YES and *NO), and finally, a field may present a check box for selection/deselection.

4.10.2 Drafts and active tables

The tree structure in ASPECT4 Business Integrator is an overview of the configurations found in the system – partly the active tables and partly the created drafts.

In ASPECT4 Business Integrator, a distinction is made between drafts and active configurations. The basic principle is that a configuration is created as a draft, and when the configuration is complete, it is moved to active configurations. If you want to change an existing configuration, first move it to drafts, make the desired changes and then move it back to active configurations.

Draft

When you have completed your work with the draft, you have the following options:
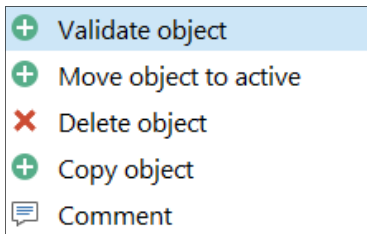
Active tables

For active tables, you have the following options:
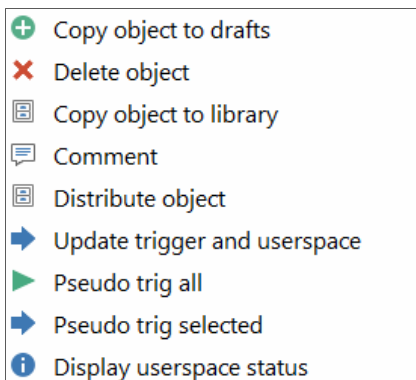
4.10.3   Work with a configuration

This headline covers the following functions:

- Batch triggers
- Insight Search (see section 3.1)
- Calendar.

4.10.4   Batch triggers

This headline covers the following functions:

- Trigger configuration for a table
- Data export formats
- General trigger configuration
- Trigger expansion profiles.

4.10.5   Trigger configuration for a table

This is used for setting up triggering on a table. This forms the basis of a number of the other functions that can be performed in a table with triggering.

When the table has been added, you can perform a number of different functions on it.
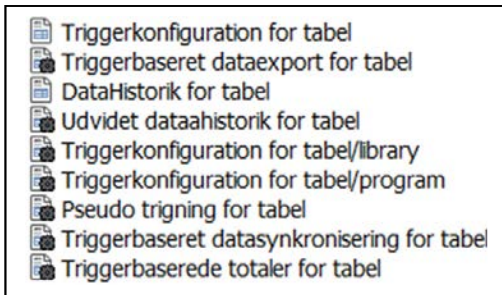
Trigger configuration for a table
This is used to specify exceptions or special conditions for the table. For example, if a table contains fields that should never result in triggering, you can specify these in "IGNORECOLUMS". If you just want to add triggering to a the table, you can leave this field blank.

Trigger-based data export for a table
Trigger-based data export is in itself a complicated mechanism with countless possibilities. Basically, the purpose is to create IFS XML files with the best possible performance. These XML files can later be used in different ways. However, the typical use is as input for ASPECT4 Business Connector for data export.

Data history for a table
If you want a data history for selected master data fields (to log changes), this is where you specify the fields for which to create a history.

Expanded data history for a table
This is used for history on general files and virktbl (in the Logistics system). Changes are logged in the AS4TRHT1 table which is placed in the data history library.

Trigger configuration for a table/library
This is used for overriding group/company/warehouse on library level.

Trigger configuration for a table/program
This is used for adding the trigger programs that are to be activated. Most trigger programs are added automatically, if a setup is relevant for them. This means that this configuration is only necessary when you want to override the default setup.

If you want to use trigger programs for workflow, you should enter e.g. EG0AWFRT.

Program names exist for the individual functions.

Pseudo triggering for a table

Pseudo triggering is a new concept. Using this technique, we can avoid some of the challenges in the use of triggers, e.g. when synchronisation of data is primarily controlled by a trigger on one specific table, even though information is also retrieved from one or more other tables.

Pseudo triggering enables you to change secondary tables to simulate a change of data in the primary table, which means that trigger synchronisation of data is performed again.

For example, with this technique we can configure that changing a customer's e-mail address in DEBWWWT1, creates a new synchronisation of the customer, e.g. for CrossWork, even though this synchronisation is controlled by triggering on DEBREGT1.

Trigger-based data synchronisation for a table

Trigger-based data synchronisation enables you to synchronise content in one table with another table (to some extent). The phrase "to some extent" has been added because we cannot handle all needs for data synchronisation, since there might be special technical conditions for field types, etc. that are NOT supported by this technique.

Trigger-based totals for a table

This configuration and the association of the trigger program EG0655RT make it possible to keep simple totals tables updated automatically.

4.10.6 Data export formats

Trigger-based data export is in itself a complicated mechanism with countless possibilities. Basically, the purpose is to create IFS XML files with the best possible performance. These XML files can later be used in different ways. However, the expected typical use is as input to ABC and from there export from ASPECT4.

4.10.7 General trigger configuration

Configuration on this levels has an influence on all triggering in the environment.

4.10.8 Trigger expansion profiles

Trigger expansion is a new option introduced with ASPECT4 Business Integrator. If a record is triggered in a given combination of group/company/warehouse, you can now use Trigger expansion to simulate the triggering of a corresponding record in a number of other group/company/warehouse combinations. For example, this can be used if customers are maintained in a common company, but the customer master data has to be synchronised automatically to other companies.

4.10.9 Calendar

For data export collection, you can use different planning calendars that determine the time interval between the creation of XML with collected transactions.

4.11 ASPECT4 CrossWork

Since more and more ASPECT4 customers have – or consider including – a CRM solution in their toolbox, we have chosen to deliver a standard integration between ASPECT4 and CRM. We have chosen to integrate with DYN CRM from Microsoft, since this is a tool many of our customers use and for which we have a profound knowledge within the EG organisation.

Basically, they are two separate systems that each contribute with elements of the total solution in relation to the processes, tasks and data structures that are used in the company. This is the reason why it is important to have strict rules for data and data ownership, since chaos or lack of synchronisation might otherwise be the likely result.

ASPECT4 functions as the master for data and data integration, since we expect that ASPECT4 contains the correct legal data in relation to the customers.

In a CRM system, you most often have to handle both customers and leads, since you start working with leads before they turn into real customers. You can create leads in DYN CRM, which will then also be created in ASPECT4. The purpose of this is only to make a "reservation" of the customer numbers, e.g. in order to use them when creating CrossWork sites, to ensure consistency.
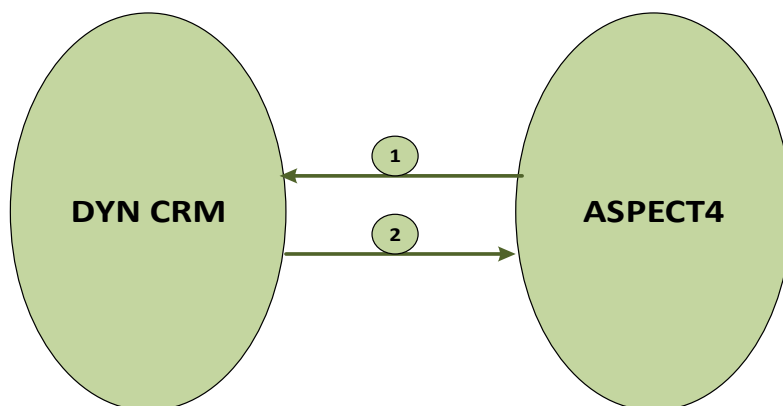
The numbers in the illustration refer to the comments and explanations below.

From ASPECT4 to DYN CRM (1)
Here transfer of the following types of data will be handled:

- Lookup tables, e.g.
    - Languages
    - Countries
    - Sales districts
    - Sales representatives.
- Receipt for lead creation including unique identification.
- Customer creation and editing.

When you create or edit a customer in ASPECT4, a message has to be sent to DYN CRM with the new value. This means that a trigger has to be added to the relevant tables that contain customer information.

From DYN CRM to ASPECT4 (2)
Here transfer of the following types of data will be handled:

• Customer creation and editing: Selected customer data.

5 ACS in general

5.1 Attachment of group/company relations

You can now attach allowed group/company relations to users and not only to function groups.

5.2 History in the application "Install ASPECT4 software" (0590)

In connection with a clean-up of despatches in application 0590, you can now save information. The information is now saved in a number of tables instead of in a library per despatch.
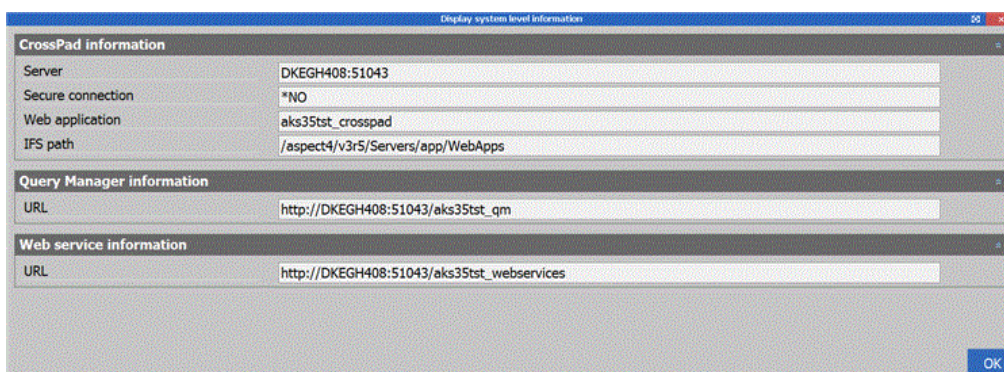
5.3 Distribution using the application "Install ASPECT4 software" (0590)

Programs and service programs in use cannot be replaced in connection with loading. Consequently, the installation of programs and service programs will take place through the libraries QRPLOBJ and EGRPLOBJ. If the object is found in the program library at installation, an IBM command is used that moves the existing object to the QRPLOBJ library, and simultaneously the new object is copied to the program library.

After installation, most objects are moved from QRPLOBJ to EGRPLOBJ. The EGRPLOBJ library contains a number of objects. It may be an advantage to delete these objects manually. This should only be done when no jobs are using the objects, e.g. after closing down the EGSERVER and similar subsystems. If everything is closed down in connection with a backup, you can do it at this time.

5.4 The application "Show System Level Information" (0361)

This application has been expanded with web information.

5.5 The application "Environment setup in ASPECT4" (0108)

Maintenance of environment setup
In connection with several processes in ASPECT4, it is necessary to know the data libraries of the individual environments. This is now possible using new functionality in application 0108. In addition, an extension has been made in application 0108, which means that any libraries in section 0154 "Library lists per group/company" can also be processed.

On the overview screen you can see if any overriding library lists have been created using section 0154 in the environment. Maintenance of these overrides can be performed using the "A" option.

5.6   The application "Maintenance of files" (0332)

This application has been expanded to enable creation of basic files for workflows. These files do not belong to a specific system, and consequently a special solution is required.

5.7   The application "List of server starts" (0653)

You can use the command EG0653ZN to start/stop a subsystem. This functionality can e.g. be used for starting a VAP subsystem from EGSERVER. By using this function, the subsystem is started at the same time as EGSERVER, and if EGSERVER is stopped, the subsystem is stopped simultaneously.

```
                        Start/stop Subsystems (EG0653ZN)

Type choices, press Enter.

Subsystem to start/stop  . . . .  _____      Name

```

6 System Technical Information

6.1 Discontinued applications

In Release 5, the old trigger applications are discontinued, i.e. the applications "Work with multitriggers" (0172), '"Work with data history" (0173) and "Data collection for history/mirror" (0652).

6.2 New installation

Please contact your account manager at EG A/S.

If you have any questions for the above, please contact the ASPECT4 hotline on phone +45 9928 3266, or send an e-mail to hotoko@eg.dk.

6.3 Prerequisites

In the application "Show System Level Information" (361), verify that the system meets the following requirements:

- ACS – level 4.7.01
- IBM – V7R2M0 or newer
- IBM Power Systems – Power6 as a minimum.

When release 5 is loaded in the application "Install ASPECT4 software" (0590), the system checks that the above system requirements have been met. Furthermore, the system checks that all required IBM licence programs are installed, that CCSID is OK, and that various other system technical parameters have been met. If the test reveals that one or more of these are missing, they will be displayed on the screen.

Insight Search increases the requirements for IBM both in terms of disk, RAM and CPU. For example, 5 million records in the new search index will take up approx. 7 GB of space.

The PCs have to fulfil the minimum system requirements for ASPECT4 Client. Find out more on www.aspect4.dk.