Step-by-Step Guide for activating a Self-Defined SIS Structure

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Business Case:
You want to create and activate Self-Defined SIS Structure for ‘Sales Order Analysis’.

This document contains Step-by-step instructions to create and activate a Self-Defined SIS Structure for Sales Order.

Note! The screen shots shown here are from IDES system ver. 4.6B and results might vary slightly in your system, depending upon the version.

IMG menu path for SIS: IMG>Logistics General>Logistics Information System (LIS)

Figure 1: IMG menu path for SIS configuration steps
Task 1: Create Self-Defined Information Structure

- Use transaction code MC21 (menu path Logistics Data Warehouse>Data Basis>Information Structures>Maintain self-defined information structures>Create) to create a Self-Defined Information Structure. Give a customer-range number 990 (any available number between 501 and 999). To make it easier, use ‘copy from’ to copy structure from S001.
Figure 3: Structure S990 is created as a copy of S001

Structure S990 is created as a copy of S001. Accordingly, you will see defaulted characteristics and key figures. Review various settings (unit, sum, etc.).

- Add two more characteristics: Sales Order Number and Item Number.

Click on ‘Choose Characteristics’ Icon and then click on ‘Selection List’ icon to choose fields from ‘field catalogs’.

Choose field catalog ‘SD: Bus transaction (order)’ by double-clicking it. Double-click on ‘Sales Document’ and ‘Sales document item’ from ‘field catalog fields’ (you may need to scroll-down).

Figure 4: Choose fields ‘Sales Document’ and ‘Sales Document Item’ from Field Catalog

You can view technical names by toggling the Switch Display icon.
Figure 5: ‘Switch display’ to view technical names

Make sure that you have selected correct characteristics as: ‘MCVBAK-VBELN’ and ‘MCVBAP-POSNR’.

Click on ‘Copy + Close’ icon and then click on ‘Copy’ icon to accept the changes.

- Review information

Double-click on characteristics and key figures to review technical information. This step is not mandatory, just for information.
Figure 6: Review technical field information for characteristics: Customer (KUNNR), Sales Order (VBELN), Item (POSNR) and Key figures: Incoming Order (AENETWR), Open Order (OAUWE)

System displays the generation log.

<table>
<thead>
<tr>
<th>Status</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>157 Date: 06/23/02, time: 14:48:16, generated by</td>
</tr>
<tr>
<td>Information</td>
<td>805 Table S990 has been saved</td>
</tr>
<tr>
<td>Information</td>
<td>805 Table S990E has been saved</td>
</tr>
</tbody>
</table>

Figure 7: Generation log for Structure S990. Table S990E is ‘Structural Information’ for Table S990

Task 2: Maintain Update Groups

- SIS IMG>Logistics Data Warehouse>Updating>Updating Definition>General Definition Using Update Groups>Maintain Update Groups

![Update Groups for Statistics Updating](image)

No new entries need to be created. You can use the existing system-delivered update groups. Use Update Group (UpdGrp) 1 for the standard order process of: SIS: Sales Document, Delivery, Billing Document and use UpdGrp 2 for the SIS: Returns, Returns Delivery, Credit Memo.

Task 3: Maintain Update Rules

- SIS IMG>Logistics Data Warehouse>Updating>Updating Definition>Specific definition using Update Rules>Maintain Update Rules>Display

Info Structure S001 and Update Group 1.
Before we create update rules for S990, let's review how update rules are defined for S001. Review rules for Characteristics and key figures.
Step-by-step guide to activate Self-defined SIS Structure

Figure 9: Update Rules for combination of Structure S001 and Update Group 1

Double-click to review specific details of the update rule for Key Figure ‘Incoming Orders’. Note that the event is ‘VA – Sales Order creation’.

Figure 10: Update rules for Key Figure ‘Incoming Orders’
Similarly review details of Key Figure ‘Sales’. Note that the Invoiced Amount (Sales Amount) is updated by event ‘VD – Billing Document’.

Figure 11: Update rules for Key Figure ‘Sales’
Similar to Update Rules of ‘S001’, we need to create Update Rules for our Self-Defined Structure ‘S990’.

SIS IMG>Logistics Data Warehouse>Updating>Updating Definition>Specific definition using Update Rules>Maintain Update Rules>Create (transaction code MC24). To make it easier, use ‘copy from’ to copy update rules from S001.

Please make sure the Source information is properly updated for all the characteristics. Since you copied the rules, the sales order and item rules are defaulted too. Make sure appropriate changes are made for events VC (delivery) and VD (Invoice).
Since we copied the Update Rules, the source field and table information is also copied. We need to change appropriately to make sure correct source information is populated. Click on “Rules for charact” and verify source information for every key figure, by clicking on ‘previous key figure’ and ‘next key figure’.
Step-by-step guide to activate Self-defined SIS Structure

Figure 16: For Event ‘VC – Shipping’, Sales Document and Item are present in MCLIPS table

Change Source information for following to MCVBRP-AUBEL and MCVBRP-AUPOS:
  o  Sales
  o  Gross Invoiced Sales
  o  Net Invoiced Sls 1
  o  Net Invoiced Sls 2
  o  Inv freight Chrgs
  o  Bill Docmnt PS5
  o  Bill Docmnt PS6
  o  Invoiced Qty
  o  Invoiced sls – cost

Change Source information for following to MCLIPS-VGBEL and MCLIPS-VGPOS:
  o  Open Orders
  o  Open Order Qty

- Save and Generate by clicking on the Generate icon.

  Repeat these rules for the combination of information structure S990 and update group 2.
  (“Copy from” info structure S001 and Update group 2).
Again, click on “Rules for charact” and verify source information for every key figure, by clicking on ‘previous key figure’ and ‘next key figure’.

Change Source information for following to MCVBRP-AUBEL and MCVBRP-AUPOS:

- Credit Memos
- Gross Credit Memos
- Net Credit Memos 1
- Net Credit Memos 2
- Credit memos – freight
- Credit memos – subtotal 5
- Credit memos – subtotal 6
- Credit memos qty
- Credit memos – cost

**Task 4: Maintain Statistics Groups**

- Maintain Statistics Groups

Maintain Statistics Groups for Customers, Materials, SD Document Types etc. Most of the pre-defined settings are enough. Make sure that settings are updated for customized objects too, e.g., SD document types for your organizations.

Also, make sure that the customer (sales view) and material Master records are updated with appropriate Statistics Groups.
Step-by-step guide to activate Self-defined SIS Structure

Figure 18: Maintain and assign statistics groups. IMG path: Updating > Updating Control > Settings: Sales > Statistics Groups

- Maintain Statistics Groups for Customers (OVRA)

Figure 19: Statistics Groups for Customers

- Maintain Statistics Groups for Material (OVRF)

Figure 20: Statistics Groups for Materials

- Maintain Statistics Groups for Sales Document (OVRN)

Figure 21: Statistics Groups for Sales Documents
Step-by-step guide to activate Self-defined SIS Structure

- Assign Statistics Groups for relevant Sales Document Type (OVRH)

Figure 22: Assign Statistics Groups to relevant Sales Documents

- Assign Statistics Groups for each Sales Document Item Type (OVRI)

Figure 23: Assign Statistics Groups to relevant Item Categories

- Assign Statistics Groups to each Delivery Type (OVRK)
Step-by-step guide to activate Self-defined SIS Structure

Figure 24: Assign Statistics Groups to relevant Delivery Types

- Assign Statistics Groups to each Delivery Item Type (OVRL)

Figure 25: Assign Statistics Groups to relevant Delivery Item Categories

- Determine Billing Document Types Relevant to Statistics (OVRM)
Step-by-step guide to activate Self-defined SIS Structure

Note: As mentioned earlier, most of the settings are already set in standard system. Make sure that customized objects specific to your company are also updated appropriately.

- Update Customer Master for Statistics Relevancy (XD02)
  Transaction Code XD02 (Sales view, field “Cust stats.Grp”)
Task 5: Assign Update Groups to Header and Item Levels

- Assign Update Groups on Header and Item levels
For combinations of Sales Area (Sales Org, Distribution Channel, Division), assign Update groups (transaction codes OVRO and OVRP).
SIS IMG>Logistics Data Warehouse>Updating>Updating Control>Settings: Sales>Update Group

- Update Groups at Item Level

Figure 29: Update Groups at Item Level

Figure 30: Update Groups at Item Level - details

- Update Groups at Header Level

Figure 31: Update Groups at Header Level
Task 6: Activate SIS Update

- Lastly, Activate SIS Update for the Structure (transaction code OMO1)

**SIS IMG path:** Logistics Data Warehouse > Updating > Updating Control > Activate Update > Choose Activity as Sales and Distribution.

Let’s update our SIS structure S990 with period as ‘Month’ and update option of ‘Asynchronous Updating (2)’.
SIS tests with Sales Order Processing  \textbf{(Order\textgreater Delivery\textgreater Invoice)}

- Create a Sales Order, transaction code VA01

\begin{verbatim}
Figure 34: Create a standard Sales Order and Sales Order 6437 is saved
\end{verbatim}

\textbf{(Pricing details)}

\begin{verbatim}
Figure 35: Pricing Details for the Sales Order
\end{verbatim}

- Execute transaction ‘MC30’ to find out which information structures are updated. Please note that this step is not mandatory.

Transaction code ‘MC30’ is worth mentioning here. This transaction code, provided user parameter MCL is set to ‘X’ in user’s master record, provides analysis of which structures are updated for the activity. It generates a log of updates to Information Structures and detailed analysis. Since, it can take resources, it is advisable not to set user parameter MCL in productive system.
Step-by-step guide to activate Self-defined SIS Structure

Figure 36: Transaction MC30 lists that Structure S990 is updated

Double-click on S990 line to view more details.

Figure 37: Transaction MC30 details for Structure S990

• Execute Standard Analysis Report.
  SAP>Logistics>Sales & Distribution>Sales Information System>Standard Analyses>Self defined analysis (transaction code MCSI). (Choose Structure S990). Enter appropriate values and execute.
Create a Delivery/PGI and review its impact on Standard Analysis Report.

Delivery 80007493 Saved, execute MC30 to review the update log.
Step-by-step guide to activate Self-defined SIS Structure

Figure 41: At the time of delivery, since Order is no more open, Open Order value is reduced

Please note in the Standard Analysis report that the Open Order value is reduced accordingly.

Figure 42: Standard Analysis report reflects correct Open Order value

- Create an Invoice and review SIS report.
Invoice 90021696 saved. Review Update log with MC30.

Figure 43: Invoiced/Sales amount is updated at the time of invoice

Note that in the Standard Analysis report, Sales value has increased.
Figure 44: Standard Analysis report reflects correct Sales Amount

- Summary changes in Information structure depending upon Sales activity

Sales Order: Note Open Order has EUR 49.60 value.

Delivery: Note Open Order value is reduced.

Invoice: Note Sales column reflects correct invoiced amount.

Figure 45: Summary – Information Structures reflects correct values depending upon the status of transaction: whether order created, shipped or invoiced
Summary
Here is the brief summary of how SD data is populated and updated in the information structure table S990.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Month</th>
<th>Customer</th>
<th>Sales Area</th>
<th>Material</th>
<th>Sales Order</th>
<th>Order Value</th>
<th>Sales</th>
<th>Open Orders</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order Create</td>
<td>2002/06</td>
<td>1460</td>
<td>1000 / 10 / 00</td>
<td>DPC1013</td>
<td>6437 / 10</td>
<td>49.60</td>
<td>0.00</td>
<td>49.60</td>
<td>Assuming order value is 49.60 for the item</td>
</tr>
<tr>
<td>Deliver Item</td>
<td>2002/06</td>
<td>1460</td>
<td>1000 / 10 / 00</td>
<td>DPC1013</td>
<td>6437 / 10</td>
<td>49.60</td>
<td>0.00</td>
<td>0.00</td>
<td>Once the order is shipped, Open Order value is accordingly reduced.</td>
</tr>
<tr>
<td>Invoice</td>
<td>2002/06</td>
<td>1460</td>
<td>1000 / 10 / 00</td>
<td>DPC1013</td>
<td>6437 / 10</td>
<td>49.60</td>
<td>49.60</td>
<td>0.00</td>
<td>Once invoice is created, Sales value is updated</td>
</tr>
</tbody>
</table>

*Mitresh Kundalia heads SAP practice division at Quality Systems & Software (www.QSandS.com). QS&S helps companies achieve world-class performance by realizing their latent business and technological potential with emphasis on SAP systems. QS&S uses Industry-wide best practices and proven implementation tools to integrate complex business processes with the SAP system. With an MBA degree in finance, Mitresh implements Financial and Logistics applications with specialization in Management reporting, Profitability Analysis, Information systems and Business Information Warehouse. He can be reached by e-mail at mitresh@QSandS.com.*