IMPROVE PERFORMANCE OF PRODUCT INDEXING IN SANA FOR SAP ECC

INTRODUCTION

Sana uses the "**Product import**" task in Sana Admin to retrieve material data from SAP ECC to build and update the catalog of a webstore. When you change material data in SAP ECC, the value of the "Last Date/Time Modified" field will be updated with the current date and time. Based on this, Sana checks whether some material data has been changed in SAP ECC since last indexing and it updates the product index by synchronizing material changes between SAP ECC and Sana. When products are indexed by Sana, material changes you have made in SAP ECC will be available in the webstore.

PRODUCT INDEXING BOTTLENECK

In SAP ECC data changes are stored in the **CDHDR** table (Change Document Header). This is a standard SAP ECC table and it stores a lot of data. The keys in this table are object class (material) and material number.

Field	Key	Ini...	Data element	Data Type	Length	Deci...	Short Description
MANDANT	✓	✓	MANDT	CLNT	3	0	Client
OBJECTCLAS	✓	✓	CDOBJECTCL	CHAR	15	0	Object class
OBJECTID	✓	✓	CDOBJECTV	CHAR	90	0	Object value
CHANGENR	✓	✓	CDCHANGENR	CHAR	10	0	Document change number
USERNAME	☐	☐	CDUSERNAME	CHAR	12	0	User name of the person responsible in change document
UDATE	☐	☐	CDDATUM	DATS	8	0	Creation date of the change document
UTIME	☐	☐	CDUZEIT	TIMS	6	0	Time changed
TCODE	☐	☐	CDTCODE	CHAR	20	0	Transaction in which a change was made
PLANCHNGNR	☐	☐	PLANCHNGNR	CHAR	12	0	Planned change number
ACT_CHNGNO	☐	☐	CD_CHNGNO	CHAR	10	0	Change number of the document created by this change
WAS_PLANND	☐	☐	CD_PLANNED	CHAR	1	0	Flag that changes were generated from planned changes
CHANGE_IND	☐	☐	CDCHNGINDH	CHAR	1	0	Application object change type (U, I, E, D)
LANGU	☐	☐	LANGU	LANG	1	0	Language Key
VERSION	☐	☐	CHAR3	CHAR	3	0	3-Byte field

Sana retrieves material changes from the **CDHDR** table in SAP ECC based on the **UDATE** (Update date) and **UTIME** (Update time) fields. Since **UDATE** and **UTIME** are non-key fields, fetching data from a query based on these fields can be slow or even lead to a timeout depending on the amount of data.

Below you can see a few suggestions that you can consider to improve performance of products indexing.

OPTION 1: CREATE INDEX FOR THE CDHDR TABLE

Indexing the **CDHDR** table or archiving the old records can significantly improve performance of the queries based on the **UDATE** (Update date) and **UTIME** (Update time) fields. This approach does not require any code changes or custom implementations.

You can ask the BASIS team to create an index as shown on the screenshot below for the **CDHDR** table or archive the old records in the table.

Advantages

1. This is the standard SAP approach.
2. No code changes and custom implementations.

OPTION 2: IMPLEMENT A BADI

If you cannot create index or optimize the **CDHDR** table, you can think about implementation of the **BADI_MATERIAL_CHECK** BADI to improve performance of products indexing, but this solution requires customizations both in SAP and the Sana add-on for SAP.

You must implement a BADI and improve the "GetProducts" API method:

1. The method **BADI_MATERIAL_CHECK~CHECK_DATA** should include the logic to update the **/SANAECOM/MARA** table with the current timestamp.

2. The method **/SANAECOM/CL_APP_GETPRODUCT~ GET_UPDATED_MATERIALS** should be overridden with the new logic to retrieve data from the **/SANAECOM/MARA** table instead of the standard SAP table **CDHDR**.

Advantages

1. There is no dependency on the standard SAP table **CDHDR**.

Disadvantages

1. The standard logic of the Sana add-on for SAP ECC must be changed.
2. It requires customizations in the customer's system which cannot be included in the standard product.
3. If you use the external system to update materials, for example "IDoc", you must check whether this approach will work for you.
4. Some material changes may not be retrieved as when using the **CDHDR** table.

OPTION 3: ARCHIVE CDHDR TABLE RECORDS

You can archive the records in the **CDHDR** table to improve record search performance. You are free to decide how many records to store in the **CDHDR** table.

OPTION 4: INCREASE SYSTEM RESOURSES

You can also think about increasing system resources to improve performance.