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# DATA VOLUME MANAGEMENT

## INFORMATION SHEET FOR SERVICE DELIVERY

### Why this service?

The amount of processed and stored data in today's businesses is constantly growing. Fingertip access to Data is required. Simply adding hard disks sometimes worsens the situation over time, as system management can become more and more difficult or performance may decrease. On SAP HANA based systems adding memory (scale up) is not an inexpensive task.

The **data volume management** service portfolio helps you to setup and monitor a data volume management strategy. One that defines how to manage and reduce future data growth and reduce existing DB size by following a holistic approach that considers and integrates the following options: data avoidance, data summarization, data deletion, data archiving and state-of-art data reduction technologies.

### AT A GLANCE

#### Key Features

- Helps save memory/disc space
- Reveals potential for data reduction of your biggest data consumers
- Considers business processes and age of data
- Provides knowledge transfer on how to implement data reduction measures
- Service Component relevant to each phase of the Data Volume Management lifecycle can be selected to assist in bringing data volumes under control

#### Benefits

- Reduced data footprint (i.e. smaller database to operate)
- Improved data quality
- Smooth implementation projects due to knowledge transfer
- Mitigates risk to business transactions from excess volumes of data

#### When to Use

- As early as possible (e.g. All systems should have housekeeping activities implemented, latest 4 weeks after going Live)
- Latest when system exceeds the originally targeted size or
- System shows performance issues
- Strongly recommended before a conversion from SAP ERP to SAP S/4HANA
- When it is recommended by Early Watch Alert

### DELIVERY IN DETAIL

#### Preparation

- SAP needs system access as well as a user/password with appropriate authorizations.
- A service preparation report will check for missing SAP Notes, which may be necessary to be implemented to have the service tools for system analysis fully working.



## Delivery

For the different phases of a Data Volume Management implementation project there are different service components defined. The delivery methods vary between the service component and the details can be found in the individual service component. In general (with the exception of **Implementation Support for DVM Apps** - the procedure is as follows:

- Analysis report will be executed on the system in scope. The results will be transferred to either the local on-premise Solution Manger or downloaded to SAP's Solution Manager
- Report will be prepared and rated
- Depending on the service component the analysis result will be either sent to customer and discussed remotely or will be used as a basis for the onsite visit.
- The results of discussion will be updated in the final service report.

### **Service Component 1: Data Volume Management Scoping**

The purpose of the DVM Scoping step is to determine if further steps towards the definition of Data Volume Management strategy incl. implementation project are promising. The reduction potential is determined based on an initial analysis of the system(s) in scope and calculated based on the age of data. Complete remote delivery.

- Remote analysis of system(s) in scope
- Remote documentation of analysis results incl. generation of draft service report
- Remote presentation and discussion of analysis results in draft service report
- Creation of final service report incl. discussion results.

### **Delivery approach - 2 Scope Options**

#### **Scope 1: Standard DVM Approach**

- Remote analysis of 30 largest tables
- Scope determination of time-based reduction potential
- Analysis report with findings on:
  - Implemented data volume management measures
  - Saving potential and reduction methods (archiving and deletion)
  - Next steps
- Presentation of the results and subsequent discussion

#### **Scope 2: HANA DB only Native Storage Extension**

- Remote analysis of top 30 tables by memory usage: Evaluation of growth, access patterns, size distribution and concrete SQL queries
- Design of one or more NSE strategies for candidate tables and summarization of the analysis into a roadmap for future implementation
- Presentation of the results and subsequent discussion

### **Service Component 2: Data Volume Management Planning**

The purpose of the DVM Planning is the evaluation and definition of guidelines for the implementation or improvement of a data volume management strategy. Based on a data analysis the major pain points are identified and discussed. This results in a detailed roadmap which contains prioritized data volume management activities. The planning step can either be based on the analysis of one or several systems to define the scope (i.e. systems, applications) of a data volume management project or can also be done to provide knowledge transfer on the general aspects of data volume management, e.g. prior to go live in a green field implementation. The Planning workshop includes knowledge transfer on the Data Volume Management methodology, the phases and required team and skills for an implementation and shows available tools.

### **Service Component 3: Data Volume Management Design**

The purpose of the Design phase is to go into details and to discuss and answer all the questions that arise during an actual implementation. This includes a deep analysis of one or several systems with detailed input for a technical blueprint of a data volume management strategy. Key to the success of a data volume management implementation project is the involvement of the business owners as it is they who finally need to sign-off the measures to be taken (like data archiving, Native Storage Extension etc.). For this reason, discussions of the effects of e.g. data archiving on business processes is vital. This includes in-depth knowledge transfer to finally come up with a customer-tailored DVM strategy.

On top of that analysis, discussion and knowledge transfer part, it is also possible to add a hands-on proof-of-concept to demonstrate the capabilities of the archiving and NSE functionality. This usually helps a lot to ease the sign off by the business owners.

In case there are already data archiving processes implemented, but the results are not satisfying, a review can be done to find options for improvement

### **Delivery approach - 2 Analysis Options**

#### **Option 1: Standard DVM Approach**

- Remote analysis of archiving and deletion objects in scope (or analysis of sizing figures)
- Workshop with business owners to prepare archiving project by discussing
  - Analysis results
  - Recommended residence times and retention times
  - Dependencies on other archiving objects
  - Review existing reduction measures
  - Options to display archived data
  - Legal and business requirements, e.g. EU GDPR
- Report with results presentation

#### **Option 2: S/4 HANA only SAP Universal Journal (ACDOCA) - Detailed Analysis**

- Remote analysis of table ACDOCA in one S4 system
- Workshop with business owners to support handling the Universal Journal Table – ACDOCA
  - Identify the key focus areas for data reduction
  - Reveal dependencies to other areas such as CO or AA data
  - Explain new process flow for financial data archiving
  - Roadmap with priorities and next steps
- Deliver service outcome as presentation

### **Service Component 4: Implementation Support for DVM**

The purpose of the Implementation Support for DVM service is to support the setup of data volume management (DVM) measures or applications. As the DVM topic is a comprehensive one, the tools offered in the DVM suite are many and varied. To ensure the right tools are deployed, an intensive engagement with the relevant parties on the customer side is required.

### **Delivery approach - 3 Implementation Support Options**

#### **1. Implementation support for Archiving and ILM Projects**

- Implementation of archiving and ILM in a copy of the productive system as Proof-Of-Concept
- Continuous support of an archiving or ILM project from PoC to production as Focus TQM

## 2. Implementation support for Proof-Of-Concept for Native Storage Extension (NSE)

- Implementation of NSE for each selected table from the roadmap in a full copy of the productive system
- Measurement of performance impact and buffer cache usage under load tests simulating productive behavior
- Load testing done by manual load tests or with Capture & Replay
- Iterative tests of different NSE strategies to minimize performance impact and maximize memory savings
- Go-Live monitoring

## 3. Implementation of DVM Work Center in Solution Manager

### Prerequisites

- Live on SAP Solution Manager 7.2 SP07
- Live on latest ST-PI and ST-A/PI components, incl. DVM notes
- Valid SAP R/3 and HTTP connections with valid user and authorizations

## PREREQUISITES

To work together during the **remote part** of the data volume management service a remote connection to your productive or quality system must be available.

To work together during the **onsite part** of the data volume management service, we require a project room and the following facilities:

- Internet access for remote connections to SAP (if possible)
- Access to all involved systems
- Flipchart or whiteboard

The project room serves as the hub for the service delivery and as a meeting point for all people involved.

The involvement of members from your business department and IT support organization during the onsite visit is crucial for the understanding of your business processes as well as the identification of important monitoring objects. Please note that the on-site service cannot take place without the involvement of your team members.

The participation of a data volume management team on the customer side consisting of:

- Project lead / test coordinator
- Representatives of the business process operation team (for example, system administrator, database administrator)
- Representatives for each of the affected applications (business process champions / power users).

On the SAP Solution Manager system the latest add-on versions and support packages should be installed. It is necessary to have the most recent version of the support tools from software component ST-A/PI applied on the systems in scope (see SAP Note 69455).



## RELATED SERVICES

- Data Protection Implementation Service with SAP ILM (Consulting Service)
- GDPR Discovery Workshop (Premium Engagement Service)



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