SAP NetWeaver® Master Data Management 7.1

Released for SAP Customers and Partners

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DOCUMENT HISTORY

Document Version	Description of Change
2.5 / August 2020	The following sections were updated for MDM 7.1 SP21: • Architecture of SAP NetWeaver MDM • Import Server • Configuration Options for MDM Server Components • Network Consideration • MDM Client Components
2.4 / March 2015	The following section was updated: • Impact of Using Tuples Instead of Qualified Tables
2.3 / March 2014	The following sections were updated for MDM 7.1 SP12: • *Sizing CPU* on page 10 • *Sizing Memory* on page 11 • *Disk Sizing* on page 11
2.2 / December 2013	The following sections were updated for MDM 7.1 SP11: • *Sizing CPU* on page 10 • *Sizing Memory* on page 11
2.1 / April 2013	The following sections were updated for MDM 7.1 SP10: • *Sizing CPU* on page 10 • *Sizing Memory* on page 11
2.0 / November 2012	The following sections were updated for MDM 7.1 SP09: • *Sizing CPU* on page 10 • *Sizing Memory* on page 11 • *Disk Sizing* on page 11
1.9	• All references to CRM repository changed to WCEM. • Updated links to MDM 7.1 Documentation Center to `http://help.sap.com/nwmdm71`.

1.8	• Sizing information for CRM repository added. See:
	  o *Master Data Server* on page 9
	  o *Sizing the Database Server* on page 14

1.7	• Guide qualified for MDM 7.1 SP08 (no updates). • Added support for Windows 7 and Windows 2008. See *MDM Client Components* on page 15.

1.6.1	• Guide updated for MDM 7.1 SP06.
	• Added limitation regarding IBM i 6.1 OS when installing multiple servers on a single machine. See *Configuration Options for MDM Server Components* on page 12.
	• Throughout the entire guide, corrected terminology relating to MDM server naming. For example, *Master Data Server* to *MDM Servers*, *MDM Server* to *Master Data Server*, and *MDM Import Server* to *Master Data Import Server*.
	• Starting from MDM 7.1 SP06, you can install and run multiple MDM server components on one physical machine. A new section has been added to this guide regarding this functionality. See *Configuration Options for MDM Server Components* on page 12.
1.4	Added information throughout the guide about the Materials repository, including a schema table.

TABLE OF CONTENTS

1 Introduction

This document provides initial sizing information for the SAP NetWeaver MDM platform. Precise recommendations for each customer will be determined on a case-by-case basis for each customer's specific requirements. The SAP sales/support team, your internal IT department, and your hardware vendor can help to define the best configuration for your environment.

1.1 Functions of SAP NetWeaver MDM

SAP NetWeaver MDM provides key capabilities that customers need to help them manage customer, product, supplier and employee information, and additionally to derive value from their investments in existing infrastructure and business applications. The main capabilities of SAP NetWeaver MDM include:

▪ **Master Data Consolidation**

Enables you to effectively aggregate master data from various SAP and non-SAP sources with de-duplication and normalization as well as pre-integration to business intelligence within the SAP NetWeaver platform.

▪ **Master Data Harmonization**

In addition to all the capabilities of the Master Data Consolidation scenario described above, distribution mechanisms ensure that master data is updated in both SAP and non-SAP systems.

▪ **Central Master Data Management**

In addition to all the above capabilities, SAP MDM enables centralized maintenance and storage of master data, with distribution mechanisms ensuring the subsequent master data update in the target client systems. It differs from Master Data Harmonization in that master data is created centrally with validation checks, and then distributed to the master data client systems for local enrichment.

▪ **Rich Product Content Management (RPCM)**

RPCM enables you to manage information about complex products with associated taxonomies and hierarchies. It permits management of any kind of structured content with aggregated master data that can be imported from various SAP and non-SAP sources.

1.2 Architecture of SAP NetWeaver MDM

The following are basic MDM landscape components:

MDM server components:

Master Data Server (MDS)	Manages access through the DBMS to one or more MDM repositories containing master data. The Master Data Server passes this information to various client components across a network.
Master Data Import Server (MDIS)	Allows you to import data automatically in conjunction with predefined inbound ports and import maps.
DBMS	Database management system includes Microsoft SQL, Oracle, IBM DB2 and MaxDB servers.

MDM client components:

MDM Data Manager	Allows users to store, manage, and update master data consisting of text, images, and other rich content, to define and manage MDM workflows, and to create taxonomies, families, and relationships.
MDM Import Manager	A design time tool which allows you to import master data from most types of flat or relational electronic source files (for example, Excel, delimited text, SQL, XML, and any ODBC-compliant source), and to restructure, cleanse,

	and normalize master data as part of the import process
MDM Syndicator	A design time tool which allows you to map and export master data to various remote systems (such as ERP master data clients, Web catalogs) and files with flat or relational formats.
APIs	▪ Java API: Provides Java interfaces to assist Web and software developers in building custom applications that call MDM functions. ▪ ABAP API: Provides access to repositories and data on a Master Data Server from an ABAP system.

MDM administration components:

MDM Console	Allows you to administer and monitor the MDS. It also allows you to create and maintain the structure of MDM repositories as well as to control access to them.
MDM CLIX	Allows you to manage the MDM software and MDM repositories using a command line interface instead of the MDM Console.

More information: *MDM 7.1 - Master Guide* on the SAP Help Portal in the *SAP MDM Documentation Center*: `help.sap.com/nwmdm71`.

The diagram below shows a basic MDM landscape:
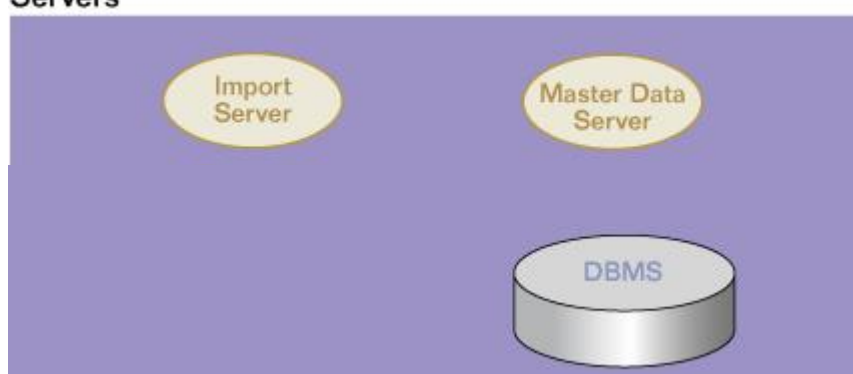
The diagram below shows a sample environment with distributed "slave" servers. Typical installations might also include equipment for staging and/or sandbox applications depending upon customers' IT policies and business practices.

Multiple Master Data Servers can be deployed to perform load balancing and failover topologies as shown in the diagram below. Each "slave" Master Data Server should have approximately the same hardware specification as the "master" Master Data Server.

Each MDM slave requires its own set of database schema objects which may reside on the same or on different database servers as those for the MDM master. As such, it is prudent to take the total number of Master Data Servers deployed and multiply that number by the size of the schema objects in order to calculate correct sizing requirements for the MDM deployment.

Note that customers can provide for add-on functionality, third-party load balancing functionality, or failover functionality as desired.
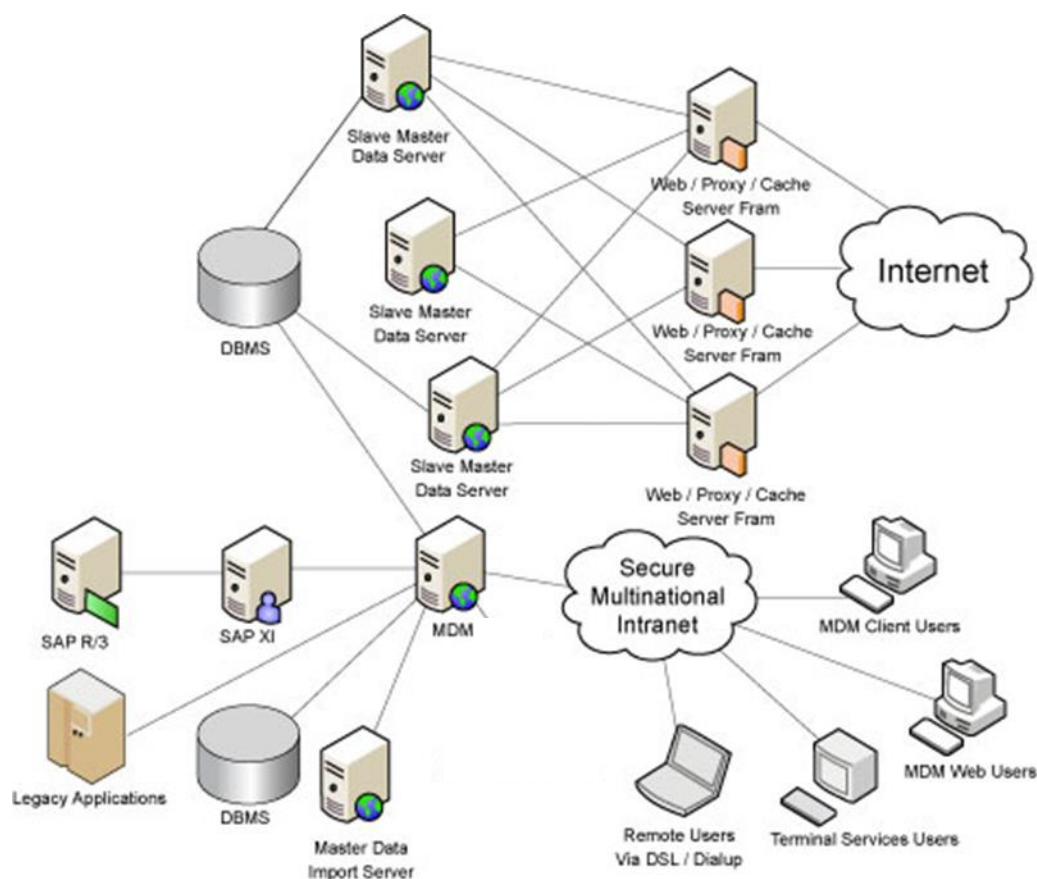
1.3 Factors that Influence Performance

The following factors have the greatest influence on the sizing of SAP NetWeaver MDM 7.1:

- **The repository data size**

  This is a function of the average record width multiplied by the number of records in the repository.

- **The repository structure**

  - Number of lookup tables in the repository

  - Number of fields in the repository tables

  - Number of lookup values in the repository, such as attribute text values

  - Number of images/PDFs/external files in the database

  - Number of publications

  - Number of workflows

- **Concurrent connections**

  The number of read and write connections to the repository, where the connection is every instance of an application that is connected to the repository.

  For example, an Import Manager Win32 client would be a single connection and a Java application could generate multiple connections, such as those used in the SAP Portal iViews.

- **Write Back Cache of DB hardware RAID**

  A *Write Back Cache* is a caching technique in which the completion of a write request is signaled as soon as the data is in cache, and actual writing to non-volatile media occurs at a later time. Enabling the write cache on a parent database server results in a significant improvement of MDM performance. To preserve the cache contents, if the system loses power, a hardware RAID controller should have a battery-backed, write-back cache.

2 Sizing Fundamentals and Terminology

SAP provides general sizing information on the SAP Service Marketplace. For the purpose of this guide, we assume that you are familiar with the sizing fundamentals. You can find more information at *http://service.sap.com/sizing*.

This section explains the most important sizing terms, as these terms are used extensively in this document.

Sizing

Sizing means determining the hardware requirements of an SAP application, such as the network bandwidth, physical memory, CPU processing power, and I/O capacity. The size of the hardware and database is influenced by both business aspects and technological aspects. This means that the number of users using the various application components and the data load they put on the server must be taken into account.

Benchmarking

Sizing information can be determined using **SAP Standard Application Benchmarks** and scalability tests (www.sap.com/benchmark). Released for technology partners, benchmarks provide basic sizing recommendations to customers by placing a substantial load upon a system during the testing of new hardware, system software components, and relational database management systems (RDBMS). All performance data relevant to the system, user, and business applications is monitored during a benchmark run and can be used to compare platforms.

SAPS

The SAP Application Performance Standard (SAPS) is a hardware-independent unit that describes the performance of a system configuration in the SAP environment. It is derived from the Sales and Distribution (SD) Benchmark, where 100 SAPS is defined as the computing power to handle 2,000 fully business processed order line items per hour.

For more information about SAPS, see *http://www.sap.com/benchmark*.

Initial Sizing

Initial sizing refers to the sizing approach that provides statements about the platform-independent requirements of the hardware resources necessary for representative, standard delivery SAP applications. The initial sizing guidelines assume optimal system parameter settings, standard business scenarios, and so on.

Expert Sizing

This term refers to a sizing exercise where customer-specific data is analyzed and used to generate a more detailed sizing result. The main objective is to determine the resource consumption of customized content and applications (not SAP standard delivery) by comprehensive measurements. For more information, see *http://service.sap.com/sizing*.

Configuration and System Landscaping

Hardware resource and optimal system configuration greatly depend on the requirements of the customer-specific project. This includes the implementation of distribution, security, and high availability solutions through different approaches using various third-party tools. High availability through redundant resources, (for example, the final resource requirements), must be adjusted accordingly.

There are some "best practices" which may be valid for a specific combination of an operating system and database. For more information, see SAP NetWeaver configuration guides: *help.sap.com/nwmdm71* → *SAP NetWeaver*.

3 Initial Sizing for SAP NetWeaver MDM

3.1 Introduction

Sizing focuses on the MDM application server. In this section, you will find sizing guidelines as well as some information regarding best practices and configuration. High availability is not part of these guidelines.

SAP NetWeaver MDM uses the database as a container to store product information (and other master data) consisting of product specifications, merchandising text, images, PDFs, and all other information needed to publish to multiple channels. When choosing between a smaller server dedicated to running the database application only, and a larger server running multiple applications, the larger server configuration is generally preferable.

This should not be confused with the file server where graphics, documents, and other information are stored, or the application server which stores or runs the portal (iViews). We do not recommend combining typical file and database services since this will result in I/O contention and performance issues.

3.2 Master Data Server

For the production environment, the MDM server components (see *Architecture of SAP NetWeaver MDM* on page 4 for definition) should be installed on a dedicated (separate) physical server or on the Virtual Machine (VM) based on hardware isolation. As for the DBMS, hosting the repositories' data, it can either be installed on the same dedicated physical machine or distributed on a separate host (see *Configuration Options for MDM Server Components* on page 12). For the development and test environment, the MDM server components may also be installed on the VM based on OS virtualization together with the database.

The repositories used for measurements are:

- *BP STD* (Business Partner Standard) - standard repository for business partners
- *BP EXT* (Business Partner Extended) - business partner BO as defined in the ESR
- *SRM* - standard SRM repository
- *MATERIALS* - standard materials repository
- *WCEM* - standard WCEM repository

The test was carried out using the following dimensions:

- For the BP and SRM repositories: 100 thousand (100K), 1 million (1M), and 5 million (5M) records in the main table
- For the MATERIALS repository: 100 thousand (100K), and 1 million (1M) records in the main table

Each schema is structured as a main table with associated subtables in a star or snowflake schema arrangement. Key characteristics of each of the schemas are shown in the following table:

Schema characteristics

| Repository Type | Number of Tables | Main Table | | Subtables |
		Total Fields	Lookup Fields	Total Fields
BP Standard	12	39	11	32
BP Extended	39	79	23	158
SRM Catalog	19	29	16	54
WCEM	58	182	115	324
Materials	77	56	34	330

For detailed definitions of the data repositories used for the sizing, see the *Appendix* on page 16.

MDM sizing is influenced by three major hardware parameters depending on repository complexity and the number of records in the main tables. These parameters are:

- CPU
- Physical memory
- Local disk size

The Master Data Server is not certified for working in the memory swapping mode and as such, an adequate amount of physical memory must be installed according to the most recent sizing guide.

Using CPUs that do not meet the sizing requirements will cause a performance bottleneck.

If the disk size is not sufficient, there will not be enough space for the creation of MDM accelerators and the repository loading will crash.

The MDM repositories (except for the Materials repository), were tested with up to 5 million records in the main table. The Materials repository was tested with up to 1 million records in the main table. Scenarios exceeding this amount of data or with substantial changes to the data model, must be evaluated case by case; (you can contact SAP for assistance).

The confidence bounds of the formulas below is 70% and depends on the MDM platform that is used (HW, OS, DBMS) as well as the repository's fill (population) rate which was averaged from actual customers' repositories.

3.2.1 Sizing CPU

CPU utilization was measured while executing scenarios that simulate an MDM user's workload. The scenario is a blend of searches (keywords and free form). Some of the searches were "heavy searches" while others were "light searches".

The test scenario runs **X** threads that simulate **X** users. Each thread carries out the following: Logs in to MDM using connection pulling, executes six searches, and then logs out. This loop is performed ten times. Between each transaction there is a think time of 20 seconds and between each cycle there is a random wait time of 1-30 seconds.

During this test, the duration of the transactions and CPU usage were measured.

The following formula will help you to evaluate the CPU required for the Master Data Server. The CPU throughput is measured in SAPS (SAP Application Performance Standard).

Linear model polynomial: $f(x) = p{*}x$

Where:

- $f(x)$ – CPU throughput in SAPS
- x – Number of concurrent users (max tested = 150)
- p – Coefficient depends on repository type and the number of records in the main table:

| Repository | Number of Records in Main Table | | | | | |
| | < 100K | < 1M | < 2M | < 3M | < 4M | < 5M |
	p	p	p	p	p	p
BP STD	44	105	168	232	295	360
BP EXT	68	201	264	341	418	497
SRM	43	112	189	267	344	422
MATERIALS	30	330	n/a	n/a	n/a	n/a
WCEM	18	28	39	50	61	72

3.2.2 Sizing Memory

The following formula will help you to evaluate the required RAM for the Master Data Server:

Linear model polynomial: $f(x) = p1^*x + p2$

Where:

- f(x) – Memory in GB
- x – Number of concurrent users (max tested = 150)
- p1 and p2 – Coefficients dependent on repository type and the number of records in the main table:

Repository	Number of Records in Main Table					
	< 100K		< 1M		< 2M	
	P1	P2	P1	P2	P1	P2
BP STD	0.0132	0.565	0. 0132	2.157	0. 0262	4.175
BP EXT	0.0005	0.92	0. 0054	5.3127	0. 0402	9.890
SRM	0.0114	0.2173	0.0169	1.069	0.0410	1.975
MATERIALS	0.001	0.6521	0.0127	3.741	n/a	n/a
WCEM	8.00E-05	1.0377	8.00E-05	8.8844	0.0003	17.6029

Repository	Number of Records in Main Table					
	< 3M		< 4M		< 5M	
	P1	P2	P1	P2	P1	P2
BP STD	0. 0392	6.193	0. 0522	8.211	0. 0652	10.23
BP EXT	0. 0616	15.755	0. 0830	21.620	0.1046	27.49
SRM	0. 0652	2.882	0. 0893	3.789	0.1136	4.696
MATERIALS	n/a	n/a	n/a	n/a	n/a	n/a
WCEM	0.0005	26.3215	0.0006	35.0401	0.0008	43.7586

3.2.3 Disk Sizing

The disk usage of the Master Data Server consists of:

- Non-constant disk space allocated for the MDM accelerators (in the Accelerators directory)
- Program and configuration files which are constant and typically less than 2 GB

The following formula will help you to evaluate the disk space required for allocation to the accelerators for the Master Data Server.

Linear model polynomial: $f(x) = p^*x$

Where:

- f(x) – Disk usage in GB
- x – Number of records in the main table
- p – Coefficient dependent on repository type

Repository	p
BP STD	0.000001112
BP EXT	0.000002153
SRM	0.0000005108
MATERIALS	0.000002247
WCEM	5.00E-06

3.2.4 Impact of Using Tuples Instead of Qualified Tables

The Business Partner Extended Repository with 1M records in the main table was used to test the effect of the conversion process; 11 out of 12 qualified tables in the repository were converted into tuples (one qualified table could not converted since it contains unsupported field for tuples) see attachment 5.4 for details.

The following table represents results of the test regarding the sizing parameters which were affected by the conversion:

Sizing parameters	Original Business Partner Extended	Modified with Tuples Business Partner Extended	Diff (%)
Memory Allocation [GB]	4.38	6.25	42.69
Accelerators Size on disk [GB]	1.47	2.34	59.18

The increment of memory and accelerator size is due to a new type of keyword indices (N-Gram) that were added in version 7.1. These indices are created side by side next to the original keyword indices for a tuple field which has "keyword index on". For fields in a qualified table with "keyword index on", only original keyword indices are built.

The sizing requirements for hardware are higher when using Tuples instead of Qualified tables. See the above table for estimates of these requirements.

3.2.5 Sizing of Other Data Models

When sizing other data models, you can use the delivered models as 'landing strips' to which you can relate the sized repository using the dimensions mentioned in table 'Schema characteristics' in section 3.2. Such a landing strip can give you a rough sizing estimation. For more precise sizing on a specific repository, you may contact SAP for assistance.

3.3 Import Server

Minimum and recommended hardware layout for the Import Server:

HW component	CPU (SAPS)	Memory (GB)
CPU (SAPS)	1600	4

3.4 Configuration Options for MDM Server Components

Starting from MDM 7.1 SP06, you can install and run multiple MDM server components on one physical machine. You can distribute the MDM server components according to the following hardware configuration options:

1. Multiple Master Data Servers on one machine with a remote Import Server on a second machine, and a DBMS on a third machine.

2. Multiple Master Data Servers and an Import Server on one machine with a remote DBMS on a separate machine.

3. Multiple Master Data Servers, an Import Server, and a DBMS all on one machine.

(1)
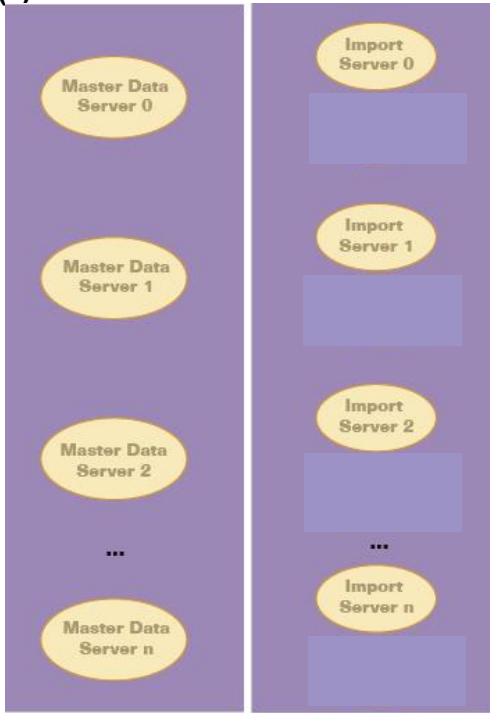
(2)
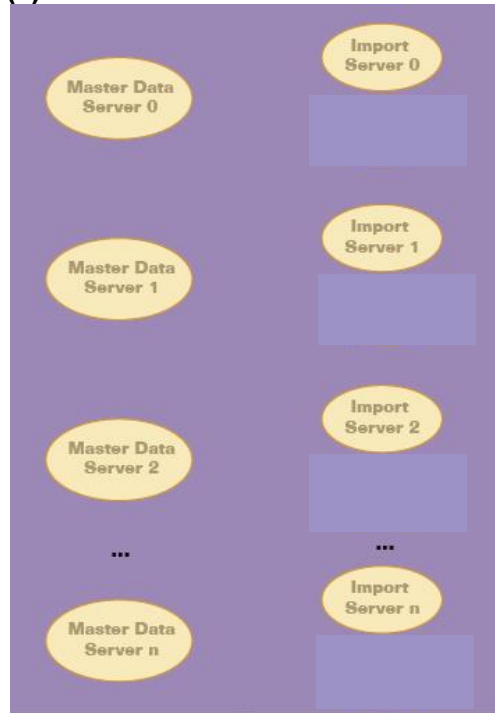
(3)
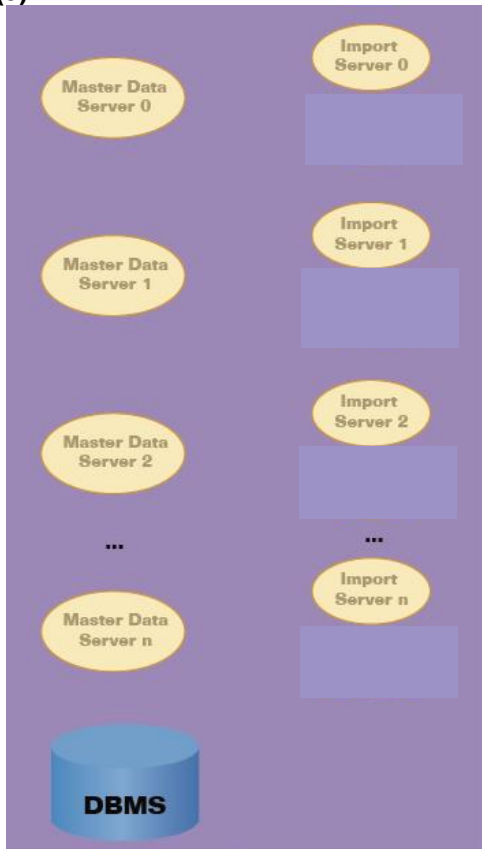
One advantage of installing multiple MDM server components on a single machine, as opposed to loading multiple MDM repositories on a single Master Data Server (MDS), is that parallel execution of imports/syndications to/from loaded MDM repositories is possible.

Sizing requirements have been tested for the aforementioned configuration options. The test results show that hardware sizing parameters are almost identical for all the configuration options; therefore, the configuring option you choose should be based solely on your preferred hardware setup.

For all configurations, MDM sizing should be calculated for every loaded repository (as described in *Master Data Server* on page 9). The results should be accumulated according to the number of Main tables in all loaded repositories.

Starting from MDM 7.1 SP06, different versions of the Master Data Server may be installed on one machine; however, the Master Data Import Server (MDIS) must be the same version as the Master Data Server (MDS) with which they are operating.

⚠️

Multiple Master Data Server installations on a single machine have not been qualified on IBM i 6.1 OS. This MDM configuration is therefore currently not supported on this platform.

3.5 Network Consideration

All MDM servers (including MDS, and MDIS) and DBMS servers should be installed in one LAN with a backbone of 1 Gbps. A network connection between MDM servers and MDM clients (MDM Data Manager and MDM API) should be at least 100 Mbps.

For more information, see SAP Note 1278497.

3.6 MDM on a Virtual Machine (VM)

MDM can run on a VM based on hardware isolation (i.e., virtualization based on logical partitioning that performs mostly on the hardware layer, LPARs) without significant performance overheads. This type of virtualization is supported for production environments.

Running MDM on a VM based on OS virtualization (i.e., multiple guest OS's are independent, but use shared hardware resources), will cause a performance overhead and is not recommended for production environments.

Running MDM on a VM based on virtualization on the application level (i.e., single OS with a kernel that allows for multiple isolated user-space instances), is not supported. For more information, see SAP Note 2230677.

3.7 Sizing the Database Server

The table below shows required resources in a hardware-independent format:

CPU in SAPS	Memory in GB	Disk
1600	4	Calculate 150% of the total size of all stored data and objects (PDFs, JPGs, and so on.)

Sample DB Sizes

For a rough estimation regarding DB size allocation on the disk, consider the following data that was received using an Oracle 10.2 Server:

Repository	Records in Main Table	DB Size (GB)
BP STD	100K	0.7
	1M	4.9
	5M	20.2
BP EXT	100K	1.1
	1M	6.6
	5M	23.2
SRM	100K	0.6
	1M	3.3
	5M	6.8
WCEM	100K	2.1
	1M	13.6
	5M	55.9
Materials	100K	3.5
	1M	9.3

3.8 SAP NW AS Java

This includes SAP NetWeaver using SAP NetWeaver MDM Java API library. Prebuilt libraries are available for SAP NetWeaver.

For portal content creation and the portal user group for MDM repository user mapping, see the MDM 7.1 Portal Content Development Guide which you can find on the SAP Help Portal in the *SAP MDM Documentation Center*: `help.sap.com/nwmdm71`.

For the portal server configuration, use best practices according to the SAP NetWeaver Portal sizing guidelines in accordance with the anticipated workload.

3.9 MDM Client Components

Minimum and recommended hardware layout for MDM Client Components:

MDM Component	HW Component	Recommended
Data Manager and Console	CPU	2 GHz
	Memory	1 GB
Import Manager and Syndicator	CPU	3 GHz
	Memory	3 GB

For more information, see SAP Note 2887407 *SAP NetWeaver Master Data Management 7.1 and Microsoft Office 365.*

We recommend that the monitor be at least 19" with a resolution of at least 1280 x 1024 for clients involved in page production.

- **Web Client**
  The Web client requires Microsoft Internet Explorer 6 or higher.

4 Appendix

4.1 BP STD Schema

Table Properties		
Table Code	**Table Type**	**No. of Rows**
MDM_BUSINESS_PARTNERS	Main	0
MDM_COUNTRIES	Flat	238
MDM_LANGUAGES	Flat	41
MDM_PARTNER_TITLES	Flat	4
MDM_PARTNER_TYPES	Flat	2
MDM_REGIONS	Hierarchy	1,685
MDM_TAX_NUMBERS	Qualified Flat	104
MDM_NUMBER_RANGES_ACCOUNT_GROUPS	Flat	24
MDM_ADDRESSES	Qualified Flat	1
MDM_ADDRESS_USAGES	Flat	17
MDM_CATEGORIES	Taxonomy	3
MDM_BUSINESS_PARTNER_ROLES	Flat	113

Field Properties		
Table Code	**Field Code**	**Field Type**
MDM_BUSINESS_PARTNERS	MDM_MDM_PARTNER_ID	Auto ID
MDM_BUSINESS_PARTNERS	MDM_PARTNER_NUMBER	Text
MDM_BUSINESS_PARTNERS	MDM_FULL_NAME	Text (calculated)
MDM_BUSINESS_PARTNERS	MDM_FULL_ADDRESS	Text (calculated)
MDM_BUSINESS_PARTNERS	MDM_CATEGORY	Lookup [Taxonomy]
MDM_BUSINESS_PARTNERS	MDM_PARTNER_TITLE	Lookup [Flat]
MDM_BUSINESS_PARTNERS	MDM_NAME_1_LAST_NAME	Text
MDM_BUSINESS_PARTNERS	MDM_NAME_2_FIRST_NAME	Text
MDM_BUSINESS_PARTNERS	MDM_NAME_3_MIDDLE_NAME	Text
MDM_BUSINESS_PARTNERS	MDM_NAME_4_BIRTH_NAME	Text
MDM_BUSINESS_PARTNERS	MDM_HOUSE_NUMBER	Text
MDM_BUSINESS_PARTNERS	MDM_STREET	Text
MDM_BUSINESS_PARTNERS	MDM_APARTMENT	Text
MDM_BUSINESS_PARTNERS	MDM_CITY	Text
MDM_BUSINESS_PARTNERS	MDM_REGION	Lookup [Hierarchy]
MDM_BUSINESS_PARTNERS	MDM_POSTAL_CODE	Text
MDM_BUSINESS_PARTNERS	MDM_COUNTRY	Lookup [Flat]
MDM_BUSINESS_PARTNERS	MDM_PO_BOX	Text
MDM_BUSINESS_PARTNERS	MDM_ADDRESS_USAGE	Lookup [Flat] (mv)
MDM_BUSINESS_PARTNERS	MDM_PHONE_NUMBER	Text
MDM_BUSINESS_PARTNERS	MDM_MOBILE_PHONE_NUMBER	Text
MDM_BUSINESS_PARTNERS	MDM_FAX_NUMBER	Text
MDM_BUSINESS_PARTNERS	MDM_E_MAIL_ADDRESS	Text
MDM_BUSINESS_PARTNERS	MDM_SEARCH_TERM_1	Text
MDM_BUSINESS_PARTNERS	MDM_SEARCH_TERM_2	Text
MDM_BUSINESS_PARTNERS	MDM_LANGUAGE	Lookup [Flat]
MDM_BUSINESS_PARTNERS	MDM_PARTNER_TYPE	Lookup [Flat]
MDM_BUSINESS_PARTNERS	MDM_ROLE	Lookup [Flat] (mv)
MDM_BUSINESS_PARTNERS	MDM_DUNS_NUMBER	Text
MDM_BUSINESS_PARTNERS	MDM_VAT_NUMBER	Text
MDM_BUSINESS_PARTNERS	MDM_SOCIAL_SECURITY_NUMBER	Text
MDM_BUSINESS_PARTNERS	MDM_DATE_BIRTH_FOUNDATION	Literal Date
MDM_BUSINESS_PARTNERS	MDM_NUMBER_RANGE_ACCOUNT_GROUP	Lookup [Flat] (mv)
MDM_BUSINESS_PARTNERS	MDM_ADDRESS	Lookup [Qualified] (mv)
MDM_BUSINESS_PARTNERS	MDM_TAX_NUMBER	Lookup [Qualified] (mv)
MDM_BUSINESS_PARTNERS	MDM_CREATE_DATE	Create Stamp
MDM_BUSINESS_PARTNERS	MDM_CREATED_BY	User Stamp
MDM_BUSINESS_PARTNERS	MDM_UPDATE_DATE	Time Stamp
MDM_BUSINESS_PARTNERS	MDM_UPDATED_BY	User Stamp
MDM_COUNTRIES	MDM_NAME	Text
MDM_COUNTRIES	MDM_ISO_CODE	Text
MDM_LANGUAGES	MDM_NAME	Text

MDM_LANGUAGES	MDM_ISO_CODE	Text
MDM_PARTNER_TITLES	MDM_NAME	Text
MDM_PARTNER_TYPES	MDM_NAME	Text
MDM_REGIONS	MDM_NAME	Text
MDM_REGIONS	MDM_CODE	Text
MDM_REGIONS	MDM_UNIQUE_ID	Text
MDM_TAX_NUMBERS	MDM_TAX_NUMBER_TYPE	Text
MDM_TAX_NUMBERS	MDM_TAX_NUMBER	Text
MDM_NUMBER_RANGES_ACCOUNT_GROUPS	MDM_NAME	Text
MDM_NUMBER_RANGES_ACCOUNT_GROUPS	MDM_TYPE	Text
MDM_ADDRESSES	MDM_IS_STANDARD_ADDRESS	Text
MDM_ADDRESSES	MDM_HOUSE_NUMBER	Text
MDM_ADDRESSES	MDM_STREET	Text
MDM_ADDRESSES	MDM_APARTMENT	Text
MDM_ADDRESSES	MDM_CITY	Text
MDM_ADDRESSES	MDM_REGION	Lookup [Hierarchy]
MDM_ADDRESSES	MDM_POSTAL_CODE	Text
MDM_ADDRESSES	MDM_COUNTRY	Lookup [Flat]
MDM_ADDRESSES	MDM_PO_BOX	Text
MDM_ADDRESSES	MDM_PHONE_NUMBER	Text
MDM_ADDRESSES	MDM_FAX_NUMBER	Text
MDM_ADDRESSES	MDM_E_MAIL_ADDRESS	Text
MDM_ADDRESSES	MDM_ADDRESS_USAGE	Lookup [Flat] (mv)
MDM_ADDRESSES	MDM_ADDRESS_NUMBER	Text
MDM_ADDRESSES	MDM_CREATE_DATE	Create Stamp
MDM_ADDRESS_USAGES	MDM_NAME	Text
MDM_CATEGORIES	MDM_NAME	Text
MDM_CATEGORIES	MDM_CODE	Text
MDM_BUSINESS_PARTNER_ROLES	MDM_NAME	Text

4.2 BP EXT Schema

Table Properties		
Table Code	**Table Type**	**No. of Rows**
BusinessPartner	Main	0
Categories	Taxonomy	12
ABCClassificationCode	Flat	5,100
SystemStandardCode	Flat	2
WorkingDayCalendarCode	Flat	3
BusinessPartnerStatus	Flat	5
BankDetails	Qualified Flat	14,752
PaymentCardDetails	Qualified Flat	20
Identification	Qualified Flat	10,101
TaxNumber	Qualified Flat	300
PostalAddress	Qualified Flat	10
ContactPerson	Qualified Flat	100
OrganisationalAssignment	Qualified Flat	50
PaymentMediumFormatCode	Flat	72
IndustrySector	Qualified Flat	60
LanguageCode	Flat	140
Telephone	Qualified Flat	2
Facsimile	Qualified Flat	2
Web	Qualified Flat	50
Email	Qualified Flat	2
Countries	Flat	200
BusinessPartnerFunctionTypeCode	Flat	50
BusinessPartnerFunctionalAreaCode	Flat	100
PowerOfAttorneyTypeCode	Flat	50
VIPReasonCode	Flat	10
PartyIdentifierTypeCode	Flat	10,013
Regions	Hierarchy	792
IndustrialSectorCode	Flat	35
PositionID	Flat	100
AddressRepresentationCode	Flat	15
MailNonDeliveryReasonCode	Flat	9
AddressUsageCode	Flat	3

PaymentCardTypeCode	Flat	5
IndustryClassificationSystemCode	Hierarchy	12
NielsenRegionCode	Hierarchy	216
TaxJurisdictionCode	Hierarchy	100
TaxIdentificationNumberTypeCode	Hierarchy	30
CommunicationAddressUsageCode	Flat	12

Field Properties		
Table Code	**Field Code**	**Field Type**
BusinessPartner	InternalID	Text
BusinessPartner	Category	Lookup [Taxonomy]
BusinessPartner	GivenNameName1Name	Text
BusinessPartner	FamilyNameName2AdditionalName	Text
BusinessPartner	BirthPlaceName	Text
BusinessPartner	BirthDate	Literal Date
BusinessPartner	BirthDateProtectedIndicator	Boolean
BusinessPartner	DeathDate	Literal Date
BusinessPartner	CustomerABCClassificationCode	Lookup [Flat]
BusinessPartner	SupplierABCClassificationCode	Lookup [Flat]
BusinessPartner	SalesAndServicePartnerABCClassificationCode	Lookup [Flat]
BusinessPartner	CompetitorABCClassificationCode	Lookup [Flat]
BusinessPartner	SystemStandardCode	Lookup [Flat]
BusinessPartner	SystemStandardCodeExpirationDate	Literal Date
BusinessPartner	MinorityOwnedIndicator	Boolean
BusinessPartner	MinorityOwnedCertificateExpirationDate	Literal Date
BusinessPartner	WomenOwnedIndicator	Boolean
BusinessPartner	WomenOwnedCertificateExpirationDate	Literal Date
BusinessPartner	SurrogateBiddingAllowedIndicator	Boolean
BusinessPartner	WorkingDayCalendarCode	Lookup [Flat]
BusinessPartner	AddressRentedIndicator	Boolean
BusinessPartner	NumberRangeIntervalBusinessPartnerGroupCode	Text
BusinessPartner	ActAsOrganisationalCentreIndicator	Boolean
BusinessPartner	CreatedFromOrganisationnalCentreIndicator	Boolean
BusinessPartner	Status	Lookup [Flat]
BusinessPartner	VendorIndicator	Boolean
BusinessPartner	BidderIndicator	Boolean
BusinessPartner	PortalProviderIndicator	Boolean
BusinessPartner	InvoicingPartyIndicator	Boolean
BusinessPartner	ContactPersonIndicator	Boolean
BusinessPartner	ProspectIndicator	Boolean
BusinessPartner	CustomerIndicator	Boolean
BusinessPartner	EmployeeIndicator	Boolean
BusinessPartner	CompetitorIndicator	Boolean
BusinessPartner	CarrierIndicator	Boolean
BusinessPartner	SalesAndServicePartnerIndicator	Boolean
BusinessPartner	LogisticServiceProviderIndicator	Boolean
BusinessPartner	HouseBankIndicator	Boolean
BusinessPartner	ClearingHouseIndicator	Boolean
BusinessPartner	TaxAuthorityIndicator	Boolean
BusinessPartner	ServicePerformerIndicator	Boolean
BusinessPartner	PayeeIndicator	Boolean
BusinessPartner	SocialInsuranceFundHeadOfficeIndicator	Boolean
BusinessPartner	SocialInsuranceFundLocalOfficeIndicator	Boolean
BusinessPartner	PrivateInsuranceProviderIndicator	Boolean
BusinessPartner	BankDetails	Lookup [Qualified] (mv)
BusinessPartner	PaymentCardDetails	Lookup [Qualified] (mv)
BusinessPartner	Identification	Lookup [Qualified] (mv)
BusinessPartner	TaxNumber	Lookup [Qualified] (mv)
BusinessPartner	AddressInformation	Lookup [Qualified] (mv)
BusinessPartner	ContactPerson	Lookup [Qualified] (mv)
BusinessPartner	OrganisationalAssignment	Lookup [Qualified] (mv)
BusinessPartner	AllowedPaymentMediumFormat	Lookup [Flat] (mv)
BusinessPartner	IndustrySector	Lookup [Qualified] (mv)
BusinessPartner	KeyWordsText	Text
BusinessPartner	AdditionalKeyWordsText	Text
BusinessPartner	VerbalCommunicationLanguageCode	Lookup [Flat]
BusinessPartner	SalutationText	Text

BusinessPartner	CorrespondenceBrailleRequiredIndicator	Boolean
BusinessPartner	CorrespondenceUpperCaseRequiredIndicator	Boolean
BusinessPartner	NaturalPersonIndicator	Boolean
BusinessPartner	ContactAllowedCode	Text
BusinessPartner	LegalCompetenceIndicator	Boolean
BusinessPartner	ExchangeInfrastructureEnabledIndicator	Boolean
BusinessPartner	MarketPlaceActiveIndicator	Boolean
BusinessPartner	SupplierSelfServiceActiveIndicator	Boolean
BusinessPartner	LocalCurrencyCode	Text
BusinessPartner	MinimumOrderValue	Currency
BusinessPartner	Telephone	Lookup [Qualified] (mv)
BusinessPartner	Fax	Lookup [Qualified] (mv)
BusinessPartner	SystemAccessWebAddress	Text
BusinessPartner	Email	Lookup [Qualified] (mv)
BusinessPartner	Web	Lookup [Qualified] (mv)
BusinessPartner	FoundationDate	Literal Date
BusinessPartner	LiquidationDate	Literal Date
BusinessPartner	NielsenRegionCode	Lookup [Hierarchy]
BusinessPartner	PersonCompanyYesNo	Boolean
BusinessPartner	CalculatedField	Text
Categories	Name	Text
ABCClassificationCode	Name	Text
ABCClassificationCode	DescABCClass	Text
SystemStandardCode	Name	Text
WorkingDayCalendarCode	WorkingDayCalendarCode	Text
WorkingDayCalendarCode	WorkingDayCalendarName	Text
WorkingDayCalendarCode	Region	Lookup [Hierarchy]
BusinessPartnerStatus	Name	Text
BankDetails	Name	Text
BankDetails	BankInternalID	Text
BankDetails	BankRoutingID	Text
BankDetails	BankRoutingIDTypeCode	Text
BankDetails	BankStandardID	Text
BankDetails	BankAccountID	Text
BankDetails	BankAccountIDCheckDigitValue	Text
BankDetails	BankAccountTypeCode	Text
BankDetails	BankAccountHolderName	Text
BankDetails	BankAccountStandardID	Text
BankDetails	ProtectedIndicator	Boolean
PaymentCardDetails	PaymentCardTypeCode	Lookup [Flat]
PaymentCardDetails	PaymentCardID	Text
PaymentCardDetails	Note	Text
PaymentCardDetails	DefaultIndicator	Boolean
Identification	PartyIdentifierTypeCode	Lookup [Flat]
Identification	BusinessPartnerID	Text
Identification	IdentifierIssuingAgencyName	Text
Identification	EntryDate	Create Stamp
Identification	AreaOfValidityCountryCode	Lookup [Flat]
Identification	AreaOfValidityRegionCode	Lookup [Hierarchy]
Identification	StartDate	Literal Date
Identification	EndDate	Literal Date
Identification	EmployeeID	Text
TaxNumber	CountryCode	Lookup [Flat]
TaxNumber	PartyTaxID	Text
TaxNumber	TaxIdentificationNumberTypeCode	Lookup [Hierarchy]
PostalAddress	AddressRepresentationCode	Lookup [Flat]
PostalAddress	CountryCode	Lookup [Flat]
PostalAddress	RegionCode	Lookup [Hierarchy]
PostalAddress	CityName	Text
PostalAddress	AdditionalCityName	Text
PostalAddress	DistrictName	Text
PostalAddress	StreetPostalCode	Text
PostalAddress	POBoxPostalCode	Text
PostalAddress	CompanyPostalCode	Text
PostalAddress	StreetPrefixName	Text
PostalAddress	AdditionalStreetPrefixName	Text
PostalAddress	StreetName	Text
PostalAddress	StreetSuffixName	Text

PostalAddress	AdditionalStreetSuffixName	Text
PostalAddress	HouseID	Text
PostalAddress	AdditionalHouseID	Text
PostalAddress	BuildingID	Text
PostalAddress	RoomID	Text
PostalAddress	FloorID	Text
PostalAddress	CareOfName	Text
PostalAddress	StreetAddressMailNonDeliveryReasonCode	Lookup [Flat]
PostalAddress	POBoxDeviatingCountryCode	Lookup [Flat]
PostalAddress	POBoxDeviatingCityName	Text
PostalAddress	POBoxID	Text
PostalAddress	POBoxIndicator	Boolean
PostalAddress	POBoxAddressMailNonDeliveryReasonCode	Lookup [Flat]
PostalAddress	TimeZoneCode	Text
PostalAddress	RegionalStructureAddressConsistencyStatusCode	Text
PostalAddress	StartDate	Literal Date
PostalAddress	EndDate	Literal Date
PostalAddress	AddressUsage	Lookup [Flat]
PostalAddress	POBoxDeviatingRegionCode	Lookup [Hierarchy]
PostalAddress	RegionalStructureAdditionalCityCode	Text
PostalAddress	RegionalStructurePOBoxDeviatingCityCode	Text
PostalAddress	RegionalStructureDistrictCode	Text
PostalAddress	RegionalStructureElementGroupCode	Text
PostalAddress	RegionalStructureCityCode	Text
PostalAddress	RegionalStructureStreetCode	Text
PostalAddress	TaxJurisdictionCode	Lookup [Hierarchy]
ContactPerson	ContactPersonID	Text
ContactPerson	ContactPersonUUID	Text
ContactPerson	NumberRangeIntervalBusinessPartnerGroupCode	Text
ContactPerson	ContactPersonGivenName	Text
ContactPerson	ContactPersonFamilyName	Text
ContactPerson	BusinessPartnerFunctionTypeCode	Lookup [Flat]
ContactPerson	BusinessPartnerFunctionalAreaCode	Lookup [Flat]
ContactPerson	PowerOfAttorneyTypeCode	Lookup [Flat]
ContactPerson	VIPReasonCode	Lookup [Flat]
ContactPerson	ContactPersonNote	Text
ContactPerson	FormattedNumberDescription	Text
ContactPerson	PhoneNumberAreaID	Text
ContactPerson	PhoneNumberSubscriberID	Text
ContactPerson	PhoneNumberExtensionID	Text
ContactPerson	PhoneNumberCountryCode	Lookup [Flat]
ContactPerson	EmailURI	Text
OrganisationalAssignment	StartDate	Literal Date
OrganisationalAssignment	EndDate	Literal Date
OrganisationalAssignment	StaffableOrganisationalCentreID	Text
OrganisationalAssignment	JobID	Text
OrganisationalAssignment	PositionID	Lookup [Flat]
PaymentMediumFormatCode	Name	Text
IndustrySector	IndustrialSectorCode	Lookup [Flat]
IndustrySector	DefaultIndicator	Boolean
IndustrySector	IndustryClassificationSystemCode	Lookup [Hierarchy]
LanguageCode	Name	Text
Telephone	MobilePhoneNumberIndicator	Boolean
Telephone	SMSEnabledIndicator	Boolean
Telephone	TelephoneNote	Text
Telephone	AreaID	Text
Telephone	SubscriberID	Text
Telephone	ExtensionID	Text
Telephone	CountryCode	Lookup [Flat]
Telephone	CountryDiallingCode	Text
Telephone	FormattedNumberDescription	Text
Telephone	NormalisedNumberDescription	Text
Telephone	UsageDeniedIndicator	Boolean
Telephone	StartDate	Literal Date
Telephone	EndDate	Literal Date
Telephone	TelephoneUsage	Lookup [Flat] (mv)
Facsimile	AreaID	Text
Facsimile	SubscriberID	Text

Facsimile	ExtensionID	Text
Facsimile	CountryCode	Lookup [Flat]
Facsimile	CountryDiallingCode	Text
Facsimile	FormattedNumberDescription	Text
Facsimile	NormalisedNumberDescription	Text
Facsimile	UsageDeniedIndicator	Boolean
Facsimile	StartDate	Literal Date
Facsimile	EndDate	Literal Date
Facsimile	FacsimileNote	Text
Facsimile	FacsimileUsage	Lookup [Flat] (mv)
Web	URI	Text
Web	UsageDeniedIndicator	Boolean
Web	WebNote	Text
Web	WebUsage	Lookup [Flat] (mv)
Email	EmailURI	Text
Email	UsageDeniedIndicator	Boolean
Email	StartDate	Literal Date
Email	EndDate	Literal Date
Email	EmailNote	Text
Email	EmailUsage	Lookup [Flat] (mv)
Countries	CountryCode	Text
Countries	CountryDiallingCode	Text
Countries	CountryName	Text
BusinessPartnerFunctionTypeCode	Name	Text
BusinessPartnerFunctionalAreaCode	Name	Text
PowerOfAttorneyTypeCode	Name	Text
VIPReasonCode	Name	Text
PartyIdentifierTypeCode	Name	Text
Regions	Name	Text
IndustrialSectorCode	Name	Text
PositionID	Name	Text
AddressRepresentationCode	Name	Text
MailNonDeliveryReasonCode	Name	Text
AddressUsageCode	Name	Text
PaymentCardTypeCode	PaymentCardTypeCode	Text
PaymentCardTypeCode	PaymentCardTypeName	Text
PaymentCardTypeCode	PaymentCardTypeDescription	Text
IndustryClassificationSystemCode	Name	Text
NielsenRegionCode	Name	Text
TaxJurisdictionCode	Name	Text
TaxIdentificationNumberTypeCode	Name	Text
CommunicationAddressUsageCode	Name	Text

4.3 SRM Schema

Table Properties		
Table Code	**Table Type**	**No. of Rows**
MDMSRM_CATALOG_ITEMS	Main	0
MDMSRM_CATEGORIES	Taxonomy	498
MDMSRM_UOM_ISO_CODE	Flat	108
MDMSRM_SUPPLIERS	Flat	207
MDMSRM_CURRENCIES	Flat	192
MDMSRM_PRICE	Qualified Flat	1
MDMSRM_REGIONS	Flat	0
MDMSRM_PRODUCT_GROUPS	Flat	1,160
MDMSRM_CONTRACT_PRICE	Qualified Flat	0
MDMSRM_MANUFACTURERS	Flat	271
MDMSRM_CATALOGS	Flat	41
MDMSRM_HYPERLINKS	Qualified Flat	3
MDMSRM_HYPERLINK_TYPES	Flat	3
MDMSRM_MIME_TYPES	Flat	3
MDMSRM_ITEM_STATUS	Flat	6
MDMSRM_CONTRACT_ITEM_CATEGORIES	Flat	2
MDMSRM_HIERARCHY	Hierarchy	0
MDMSRM_PURCHASING_ORGANIZATIONS	Flat	50
MDMSRM_ITEM_TYPES	Flat	5

Field Properties		
Table Code	**Field Code**	**Field Type**
MDMSRM_CATALOG_ITEMS	MDMSRM_SUPPLIER	Lookup [Flat]
MDMSRM_CATALOG_ITEMS	MDMSRM_SUPPLIER_CATALOG_NAME	Lookup [Flat]
MDMSRM_CATALOG_ITEMS	MDMSRM_SUPPLIER_PN	Text Normalized
MDMSRM_CATALOG_ITEMS	MDMSRM_ITEM_TYPE	Lookup [Flat]
MDMSRM_CATALOG_ITEMS	MDMSRM_SHORT_DESCRIPTION	Text
MDMSRM_CATALOG_ITEMS	MDMSRM_PRODUCT_GROUP	Lookup [Flat]
MDMSRM_CATALOG_ITEMS	MDMSRM_PRODUCT_ID	Text
MDMSRM_CATALOG_ITEMS	MDMSRM_CATEGORY	Lookup [Taxonomy]
MDMSRM_CATALOG_ITEMS	MDMSRM_HIERARCHY	Lookup [Hierarchy]
MDMSRM_CATALOG_ITEMS	MDMSRM_SERVICE_ITEM	Boolean
MDMSRM_CATALOG_ITEMS	MDMSRM_PRICE_INFORMATION	Lookup [Qualified] (mv)
MDMSRM_CATALOG_ITEMS	MDMSRM_CONTRACT_PRICE	Lookup [Qualified] (mv)
MDMSRM_CATALOG_ITEMS	MDMSRM_LONG_DESCRIPTION	Text Large
MDMSRM_CATALOG_ITEMS	MDMSRM_SPECIAL_SEARCH_TERMS	Text
MDMSRM_CATALOG_ITEMS	MDMSRM_EXTERNAL_MANUFACTURER	Lookup [Flat]
MDMSRM_CATALOG_ITEMS	MDMSRM_MANUFACTURER_PART_NUMBER	Text Normalized
MDMSRM_CATALOG_ITEMS	MDMSRM_STANDARDIZED_MANUFACTURER _PART_NUMBER	Text
MDMSRM_CATALOG_ITEMS	MDMSRM_DELIVERY_TIME_IN_DAY	Integer
MDMSRM_CATALOG_ITEMS	MDMSRM_UNIT_OF_MEASURE	Lookup [Flat]
MDMSRM_CATALOG_ITEMS	MDMSRM_ORDER_UNIT	Lookup [Flat]
MDMSRM_CATALOG_ITEMS	MDMSRM_MINIMUM_QUANTITY	Measurement
MDMSRM_CATALOG_ITEMS	MDMSRM_MINIMUN_QUANTITY_UOM	Lookup [Flat]
MDMSRM_CATALOG_ITEMS	MDMSRM_HYPERLINK	Lookup [Qualified] (mv)
MDMSRM_CATALOG_ITEMS	MDMSRM_PDF	Lookup [PDF]
MDMSRM_CATALOG_ITEMS	MDMSRM_IMAGE	Lookup [Image] (mv)
MDMSRM_CATALOG_ITEMS	MDMSRM_CATALOG_ITEM_GUID	Auto ID
MDMSRM_CATALOG_ITEMS	MDMSRM_SUPPLIER_ITEM_STATUS	Boolean
MDMSRM_CATALOG_ITEMS	MDMSRM_ITEM_STATUS	Lookup [Flat]
MDMSRM_CATALOG_ITEMS	MDMSRM_PRICE_UPDATED	Time Stamp
MDMSRM_CATALOG_ITEMS	MDMSRM_ITEM_STATUS_CHANGE	Time Stamp
MDMSRM_CATEGORIES	MDMSRM_CATEGORY_NAME	Text
MDMSRM_UOM_ISO_CODE	MDMSRM_UOM_DESCRIPTION	Text
MDMSRM_UOM_ISO_CODE	MDMSRM_UOM_ISO_CODE	Text
MDMSRM_UOM_ISO_CODE	MDMSRM_UOM_COMMERCIAL_UNIT_FORMA T	Text
MDMSRM_SUPPLIERS	MDMSRM_SUPPLIER_NAME	Text
MDMSRM_SUPPLIERS	MDMSRM_SUPPLIER_ID	Text
MDMSRM_SUPPLIERS	MDMSRM_EMAIL_ADDRESS	Text
MDMSRM_SUPPLIERS	MDMSRM_PHONE_NUMBER	Text
MDMSRM_CURRENCIES	MDMSRM_CURRENCY_DESCRIPTION	Text
MDMSRM_CURRENCIES	MDMSRM_CURRENCY_ISO_CODE	Text
MDMSRM_CURRENCIES	MDMSRM_DECIMALS	Integer
MDMSRM_CURRENCIES	MDMSRM_SYMBOL	Text
MDMSRM_CURRENCIES	MDMSRM_SYMBOL_POSITION	Boolean
MDMSRM_PRICE	MDMSRM_LOWER_BOUND	Integer
MDMSRM_PRICE	MDMSRM_PURCHASING_INFO_RECORD_ID	Text
MDMSRM_PRICE	MDMSRM_PURCHASING_ORGANIZATION	Lookup [Flat]
MDMSRM_PRICE	MDMSRM_AMOUNT	Currency
MDMSRM_PRICE	MDMSRM_CURRENCY	Lookup [Flat]
MDMSRM_PRICE	MDMSRM_PRICE_BASE_QUANTITY	Measurement
MDMSRM_PRICE	MDMSRM_PRICE_BASE_QUANTITY_UOM	Lookup [Flat]
MDMSRM_REGIONS	MDMSRM_REGION_NAME	Text
MDMSRM_PRODUCT_GROUPS	MDMSRM_MATERIAL_GROUP_DESCRIPTION	Text
MDMSRM_PRODUCT_GROUPS	MDMSRM_MATERIAL_GROUP_CODE	Text
MDMSRM_CONTRACT_PRICE	MDMSRM_CONTRACT_ID	Text
MDMSRM_CONTRACT_PRICE	MDMSRM_CONTRACT_ITEM_ID	Text
MDMSRM_CONTRACT_PRICE	MDMSRM_CONTRACT_ITEM_CATEGORY	Lookup [Flat]
MDMSRM_CONTRACT_PRICE	MDMSRM_LOWER_BOUND	Integer
MDMSRM_CONTRACT_PRICE	MDMSRM_AMOUNT	Currency
MDMSRM_CONTRACT_PRICE	MDMSRM_CURRENCY	Lookup [Flat]

MDMSRM_CONTRACT_PRICE	MDMSRM_DISCOUNT	Measurement
MDMSRM_CONTRACT_PRICE	MDMSRM_OBSOLETE	Boolean
MDMSRM_CONTRACT_PRICE	MDMSRM_PRICE_BASE_QUANTITY	Measurement
MDMSRM_CONTRACT_PRICE	MDMSRM_PRICE_BASE_QUANTITY_UOM	Lookup [Flat]
MDMSRM_MANUFACTURERS	MDMSRM_MANUFACTURER_NAME	Text
MDMSRM_CATALOGS	MDMSRM_CATALOG_NAME	Text
MDMSRM_CATALOGS	MDMSRM_CATALOG_ID	Text
MDMSRM_CATALOGS	MDMSRM_VERSION_ID	Text
MDMSRM_CATALOGS	MDMSRM_SUPPLIER	Lookup [Flat]
MDMSRM_CATALOGS	MDMSRM_VALID_PERIOD_START_DATE	Literal Date
MDMSRM_CATALOGS	MDMSRM_VALID_PERIOD_END_DATE	Literal Date
MDMSRM_HYPERLINKS	MDMSRM_TYPE	Lookup [Flat]
MDMSRM_HYPERLINKS	MDMSRM_MIME_TYPE	Lookup [Flat]
MDMSRM_HYPERLINKS	MDMSRM_URL	Text
MDMSRM_HYPERLINKS	MDMSRM_URL_DESCRIPTION	Text
MDMSRM_HYPERLINK_TYPES	MDMSRM_HYPERLINK_TYPE_NAME	Text
MDMSRM_MIME_TYPES	MDMSRM_MIME_TYPE_NAME	Text
MDMSRM_ITEM_STATUS	MDMSRM_ITEM_STATUS_NAME	Text
MDMSRM_CONTRACT_ITEM_CATEGORIES	MDMSRM_ITEM_CATEGORY_NAME	Text
MDMSRM_HIERARCHY	MDMSRM_HIERARCHY_NAME	Text
MDMSRM_HIERARCHY	MDMSRM_HIERARCHY_CODE	Text
MDMSRM_PURCHASING_ORGANIZATIONS	MDMSRM_PURCHASING_ORGANIZATION_NAME	Text
MDMSRM_PURCHASING_ORGANIZATIONS	MDMSRM_PURCHASING_ORGANIZATION_CODE	Text
MDMSRM_ITEM_TYPES	MDMSRM_ITEM_TYPE_NAME	Text
MDMSRM_ITEM_TYPES	MDMSRM_ITEM_TYPE_CODE	Text

4.4 Materials Schema

Table Properties		
Table Code	**Table Type**	**No. of Rows**
Products	Main	21
Industries	Flat	5
Material_Groups	Flat	104
Units	Flat	123
Basic_Materials	Flat	6
Laboratories	Flat	2
Transportation_Groups	Flat	2
Sales_Divisions	Flat	27
Product_Allocation	Flat	20
DG_Indicator_Profiles	Flat	4
Material_Types	Flat	38
Item_Category_Groups	Flat	40
Unit_of_Measure_EAN_UPC	Qualified Flat	123
EAN_Categories	Flat	16
Location_Data	Qualified Flat	2
Serial_Number_Management_Profiles	Flat	4
Distribution_Profiles	Flat	3
Loading_Groups	Flat	3
Checking_Groups	Flat	10
Freight_Groups	Flat	5
Countries	Flat	244
Material_Qualifies_for_Discount	Flat	4
Export_Import_Material_Groups	Flat	3
Exemption_Certificate__Indicator_for_Legal_Control	Flat	4
Purchasing_Groups	Flat	3
Quota_Arrangement_Usage	Flat	4
Variable_Order_Units	Flat	3
Automatic_Purchase_Order_Allowed	Flat	2
Item_Relevant_To_JIT_Delivery_Schedules	Flat	2
Post_to_Inspection_Stock	Flat	3
Replacement_Part	Flat	3
Regions	Flat	1766
Yes_No_Indicator	Flat	2

Backflush_Indicator	Flat		2
MRP_Types	Flat		26
Procurement_Types	Flat		4
Planning_Cycles	Flat		4
Sales_Organizations	Flat		30
Distribution_Channels	Flat		1813
Sales_Data	Qualified Flat		6000
Valuation_Areas	Flat		5
Material_Valuation	Qualified Flat		100
Price_Control_Indicator	Flat		2
Plants	Flat		9
Commodity_Codes	Flat		11
MRP_Controllers	Flat		4
Scheduling_Margin_Key_for_Floats	Flat		2
Lot_Sizes	Flat		14
Rounding_Profiles	Flat		7
Storage_Costs_Indicator	Flat		5
APO_relevant	Flat		4
Dependent_Requirements	Flat		3
Planning_Strategy_Groups	Flat		34
Fiscal_Year_Variants	Flat		12
Period_Indicator	Flat		5
Valuation_Categories	Flat		5
Valuation_Types	Flat		11
Valuation_Classes	Flat		16
UNSPSC_Categories	Hierarchy		19778
Category_Application	Flat		3
eClass	Taxonomy		27891
Product_Hierarchy	Hierarchy		0
FinancialsProcessUsability	Qualified Flat		100
AvailabilityConfirmationProcessUsability	Qualified Flat		1012
Material_statistics_Groups	Flat		4
Volume_rebate_Groups	Flat		5
Commission_Groups	Flat		4
Material_Pricing_Groups	Flat		5
Account_assignment_Groups	Flat		6
Listing_procedure	Flat		3
Standard_cost_estimate	Flat		3
Valuation_Variant	Flat		5
Costing_Version	Flat		3
ProductProcessControlStatus	Flat		4
SupplyPlanningArea	Flat		32
AvailabilityConfirmationMode	Flat		1005
FinancialsSpecification	Flat		3

Field Properties		
Table Code	**Field Code**	**Field Type**
Products	Id	Auto ID
Products	Material_Number	Text
Products	Description	Text
Products	Material_Type	Lookup [Flat]
Products	Material_Group	Lookup [Flat]
Products	External_Material_Group	Text
Products	UNSPSC_Category	Lookup [Hierarchy]
Products	eClass_Classification	Lookup [Taxonomy]
Products	Basic_Material	Lookup [Flat]
Products	Production_Memo	Text
Products	Size__Dimensions_	Text
Products	Old_Material_Number	Text
Products	Laboratory	Lookup [Flat]
Products	Division	Lookup [Flat]
Products	Product_Allocation	Lookup [Flat]
Products	Item_Category_Group	Lookup [Flat]
Products	Dangerous_Goods_Profile	Lookup [Flat]
Products	Highly_Viscous	Lookup [Flat]
Products	In_bulk___Liquid	Lookup [Flat]
Products	Batch_Management	Lookup [Flat]

Products	Environmentally_Relevant	Lookup [Flat]
Products	Order_Unit	Lookup [Flat]
Products	Variable_Order_Unit	Lookup [Flat]
Products	Transportation_Group	Lookup [Flat]
Products	Material_Qualifies_for_Discount	Lookup [Flat]
Products	Base_Unit	Lookup [Flat]
Products	Gross_Weight	Real
Products	Net_Weight	Real
Products	Weight_Unit	Lookup [Flat]
Products	Volume	Real
Products	Volume_Unit	Lookup [Flat]
Products	Length	Real
Products	Width	Real
Products	Height	Real
Products	L_W_H_Unit	Lookup [Flat]
Products	EAN_Category	Lookup [Flat]
Products	EAN_UPC	Text
Products	Industry_Sector	Lookup [Flat]
Products	Maintenance_Status	Text
Products	Approved_Batch_Record_required	Lookup [Flat]
Products	Allowed_Packaging_Volume	Real
Products	Allowed_Packaging_Volume_Unit	Lookup [Flat]
Products	Excess_Volume_Tolerance	Real
Products	Closed_Packaging	Lookup [Flat]
Products	Global_Data_Synchronization_Relevant	Lookup [Flat]
Products	Update_Date	Time Stamp
Products	Update_By	User Stamp
Products	Creation_Date	Create Stamp
Products	Create_By	User Stamp
Products	Unit_of_Measure_EAN_UPC	Lookup [Qualified] (mv)
Products	Location_Data	Lookup [Qualified] (mv)
Products	Sales_Data	Lookup [Qualified] (mv)
Products	Material_Valuation	Lookup [Qualified] (mv)
Products	FinancialsProcessUsability	Lookup [Qualified] (mv)
Products	AvailabilityConfirmationProcessUsability	Lookup [Qualified] (mv)
Products	Duplicate_Label__Material_Number_	Integer
Industries	Name	Text
Industries	Code	Text
Material_Groups	Name	Text
Material_Groups	Code	Text
Units	Name	Text
Units	ISO_Code	Text
Units	SAP_Code	Text
Basic_Materials	Name	Text
Laboratories	Name	Text
Transportation_Groups	Name	Text
Sales_Divisions	Name	Text
Sales_Divisions	Code	Text
Product_Allocation	Name	Text
DG_Indicator_Profiles	Name	Text
Material_Types	Name	Text
Material_Types	Code	Text
Material_Types	Application	Lookup [Flat]
Item_Category_Groups	Name	Text
Item_Category_Groups	Code	Text
Unit_of_Measure_EAN_UPC	Unit	Lookup [Flat]
Unit_of_Measure_EAN_UPC	Numerator	Integer
Unit_of_Measure_EAN_UPC	Denominator	Integer
Unit_of_Measure_EAN_UPC	Length	Real
Unit_of_Measure_EAN_UPC	Width	Real
Unit_of_Measure_EAN_UPC	Height	Real
Unit_of_Measure_EAN_UPC	L_W_H_Unit	Lookup [Flat]
Unit_of_Measure_EAN_UPC	Volume	Real
Unit_of_Measure_EAN_UPC	Volume_Unit	Lookup [Flat]
Unit_of_Measure_EAN_UPC	Gross_Weight	Real
Unit_of_Measure_EAN_UPC	Weight_Unit	Lookup [Flat]
Unit_of_Measure_EAN_UPC	EAN_Category	Lookup [Flat]
Unit_of_Measure_EAN_UPC	EAN_UPC	Text

EAN_Categories	Name	Text
EAN_Categories	Code	Text
Location_Data	Plant	Lookup [Flat]
Location_Data	Unit_of_Issue	Lookup [Flat]
Location_Data	Profit_Center	Text
Location_Data	Serial_Number_Profile	Lookup [Flat]
Location_Data	Negative_Stocks_Allowed	Lookup [Flat]
Location_Data	Distribution_Profile	Lookup [Flat]
Location_Data	Replacement_Part	Lookup [Flat]
Location_Data	Loading_Group	Lookup [Flat]
Location_Data	Checking_Group	Lookup [Flat]
Location_Data	Shipping_Setup_Time	Real
Location_Data	Base_Quantity	Real
Location_Data	Shipping_Processing_Time	Real
Location_Data	Freight_Group	Lookup [Flat]
Location_Data	Commodity_Code	Lookup [Flat]
Location_Data	UOM_for_Commodity_Code	Lookup [Flat]
Location_Data	Export_Import_Material_Group	Lookup [Flat]
Location_Data	Country_of_Origin	Lookup [Flat]
Location_Data	Region_of_Origin	Lookup [Flat]
Location_Data	Exemption_Certificate__Indicator_for_Legal_Control	Lookup [Flat]
Location_Data	Exemption_Certificate__Number_in_Export_Import	Text
Location_Data	Exemption_Certificate__Issue_Date_of_Exemption_Certificate	Literal Date
Location_Data	Military_Goods	Lookup [Flat]
Location_Data	Critical_Part	Lookup [Flat]
Location_Data	Purchasing_Group	Lookup [Flat]
Location_Data	Receipt_Processing_Time	Integer
Location_Data	Quota_Arrangement_Usage	Lookup [Flat]
Location_Data	Automatic_Purchase_Order_Allowed	Lookup [Flat]
Location_Data	Source_List_Requirement	Lookup [Flat]
Location_Data	Item_Relevant_To_JIT_Delivery_Schedules	Lookup [Flat]
Location_Data	Post_to_Inspection_Stock	Lookup [Flat]
Location_Data	Batch_Management	Lookup [Flat]
Location_Data	Backflush_Indicator	Lookup [Flat]
Location_Data	Maximum_Stock_Level	Real
Location_Data	Minimum_Safety_Stock	Real
Location_Data	Safty_Stock	Real
Location_Data	MRP_Type	Lookup [Flat]
Location_Data	Procurement_Type	Lookup [Flat]
Location_Data	Planning_Cycle	Lookup [Flat]
Location_Data	Fixed_Lot_Size	Real
Location_Data	Minimum_Lot_Size	Real
Location_Data	Maximum_Lot_Size	Real
Location_Data	Planned_Delivery_Time_in_Dys	Integer
Location_Data	Total_Replenishment_Lead_Time__in_workdays_	Integer
Location_Data	MRP_Controller	Lookup [Flat]
Location_Data	Scheduling_Margin_Key_for_Floats	Lookup [Flat]
Location_Data	Material_planning_Lot_Size	Lookup [Flat]
Location_Data	Reorder_Point	Real
Location_Data	Rounding_Value_for_Purchase_Order_Quantity	Real
Location_Data	Rounding_Profile	Lookup [Flat]
Location_Data	Storage_Costs_Indicator	Lookup [Flat]
Location_Data	APO_Relevant	Lookup [Flat]
Location_Data	Dependent_Requirements	Lookup [Flat]
Location_Data	Planning_Strategy_Group	Lookup [Flat]
Location_Data	Fiscal_Year_Variant	Lookup [Flat]
Location_Data	Period_Indicator	Lookup [Flat]
Location_Data	Material_Can_Be_Co_Product	Lookup [Flat]
Location_Data	Fixed_Price_Co_Product	Lookup [Flat]
Location_Data	Production_Unit	Lookup [Flat]
Serial_Number_Management_Profiles	Name	Text
Serial_Number_Management_Profiles	Code	Text
Distribution_Profiles	Name	Text

Loading_Groups	Name	Text
Checking_Groups	Name	Text
Freight_Groups	Name	Text
Freight_Groups	Code	Text
Countries	Name	Text
Countries	ISO_Alpha_Code	Text
Material_Qualifies_for_Discount	Name	Text
Export_Import_Material_Groups	Name	Text
Export_Import_Material_Groups	Code	Text
Exemption_Certificate__Indicator_for_ Legal_Control	Name	Text
Purchasing_Groups	Name	Text
Purchasing_Groups	Code	Text
Quota_Arrangement_Usage	Name	Text
Variable_Order_Units	Name	Text
Automatic_Purchase_Order_Allowed	Name	Text
Item_Relevant_To_JIT_Delivery_Sche dules	Name	Text
Post_to_Inspection_Stock	Name	Text
Replacement_Part	Name	Text
Regions	Name	Text
Regions	Code	Text
Yes_No_Indicator	Name	Text
Yes_No_Indicator	Code	Text
Backflush_Indicator	Name	Text
Backflush_Indicator	Code	Text
MRP_Types	Name	Text
MRP_Types	Code	Text
Procurement_Types	Name	Text
Procurement_Types	Code	Text
Planning_Cycles	Name	Text
Planning_Cycles	Code	Text
Sales_Organizations	Name	Text
Sales_Organizations	Code	Text
Distribution_Channels	Name	Text
Distribution_Channels	Code	Text
Sales_Data	Sales_Organization	Lookup [Flat]
Sales_Data	Distribution_Channel	Lookup [Flat]
Sales_Data	Sales_unit	Lookup [Flat]
Sales_Data	Item_Category_Group	Lookup [Flat]
Sales_Data	MSGFN	Text
Sales_Data	LVORM	Boolean
Sales_Data	VERSG	Lookup [Flat]
Sales_Data	BONUS	Lookup [Flat]
Sales_Data	PROVG	Lookup [Flat]
Sales_Data	SKTOF	Boolean
Sales_Data	VMSTA	Text
Sales_Data	VMSTD	Literal Date
Sales_Data	AUMNG	Integer
Sales_Data	LFMNG	Integer
Sales_Data	EFMNG	Integer
Sales_Data	SCMNG	Lookup [Flat]
Sales_Data	SCHME	Lookup [Flat]
Sales_Data	DWERK	Lookup [Flat]
Sales_Data	PMATN	Text
Sales_Data	KONDM	Lookup [Flat]
Sales_Data	KTGRM	Lookup [Flat]
Sales_Data	MVGR1	Lookup [Flat]
Sales_Data	MVGR2	Lookup [Flat]
Sales_Data	MVGR3	Lookup [Flat]
Sales_Data	MVGR4	Lookup [Flat]
Sales_Data	MVGR5	Lookup [Flat]
Sales_Data	SSTUF	Integer
Sales_Data	PFLKS	Integer
Sales_Data	LSTFL	Lookup [Flat]
Sales_Data	LSTVZ	Lookup [Flat]
Sales_Data	LSTAK	Boolean
Sales_Data	PRAT1	Integer

Sales_Data	PRAT2	Integer
Sales_Data	PRAT3	Integer
Sales_Data	PRAT4	Integer
Sales_Data	PRAT5	Integer
Sales_Data	PRAT6	Integer
Sales_Data	PRAT7	Integer
Sales_Data	PRAT8	Integer
Sales_Data	PRAT9	Integer
Sales_Data	PRATA	Integer
Sales_Data	VAVME	Boolean
Sales_Data	RDPRF	Text
Sales_Data	MEGRU	Lookup [Flat]
Sales_Data	PMATN_EXTERNAL	Text
Sales_Data	PMATN_VERSION	Integer
Sales_Data	PMATN_GUID	Text
Sales_Data	PRODH	Lookup [Hierarchy]
Valuation_Areas	Code	Text
Material_Valuation	Valuation_area	Lookup [Flat]
Material_Valuation	Valuation_Type	Lookup [Flat]
Material_Valuation	Valuation_Category	Lookup [Flat]
Material_Valuation	Price_Control_Indicator	Lookup [Flat]
Material_Valuation	Moving_Average_Price_Periodic_Unit_Price	Real
Material_Valuation	Standard_Price	Real
Material_Valuation	Valuation_Class	Lookup [Flat]
Material_Valuation	MSGFN	Text
Material_Valuation	LVORM	Boolean
Material_Valuation	PEINH	Text
Material_Valuation	VMVPR	Lookup [Flat]
Material_Valuation	VMVER	Real
Material_Valuation	VMSTP	Real
Material_Valuation	VMPEI	Lookup [Flat]
Material_Valuation	VMBKL	Lookup [Flat]
Material_Valuation	VJVPR	Lookup [Flat]
Material_Valuation	VJVER	Real
Material_Valuation	VJSTP	Real
Material_Valuation	LFGJA	Lookup [Flat]
Material_Valuation	LFMON	Lookup [Flat]
Material_Valuation	ZKPRS	Real
Material_Valuation	ZKDAT	Literal Date
Material_Valuation	BWPRS	Real
Material_Valuation	BWPRH	Real
Material_Valuation	VJBWS	Real
Material_Valuation	VJBWH	Real
Material_Valuation	VVJLB	Real
Material_Valuation	VVMLB	Real
Material_Valuation	VVSAL	Real
Material_Valuation	ZPLPR	Real
Material_Valuation	ZPLP1	Real
Material_Valuation	ZPLP2	Real
Material_Valuation	ZPLP3	Real
Material_Valuation	ZPLD1	Literal Date
Material_Valuation	ZPLD2	Literal Date
Material_Valuation	ZPLD3	Literal Date
Material_Valuation	KALKZ	Lookup [Flat]
Material_Valuation	KALKL	Lookup [Flat]
Material_Valuation	XLIFO	Boolean
Material_Valuation	MYPOL	Integer
Material_Valuation	BWPH1	Real
Material_Valuation	BWPS1	Real
Material_Valuation	ABWKZ	Boolean
Material_Valuation	PSTAT	Text
Material_Valuation	KALN1	Real
Material_Valuation	KALNR	Real
Material_Valuation	BWVA1	Lookup [Flat]
Material_Valuation	BWVA2	Lookup [Flat]
Material_Valuation	BWVA3	Lookup [Flat]
Material_Valuation	VERS1	Lookup [Flat]
Material_Valuation	VERS2	Lookup [Flat]

Material_Valuation	VERS3	Lookup [Flat]
Material_Valuation	HRKFT	Text
Material_Valuation	KOSGR	Text
Material_Valuation	PPRDZ	Lookup [Flat]
Material_Valuation	PPRDL	Lookup [Flat]
Material_Valuation	PPRDV	Lookup [Flat]
Material_Valuation	PDATZ	Lookup [Flat]
Material_Valuation	PDATL	Lookup [Flat]
Material_Valuation	PDATV	Lookup [Flat]
Material_Valuation	EKALR	Boolean
Material_Valuation	VPLPR	Real
Material_Valuation	MLMAA	Text
Material_Valuation	MLAST	Text
Material_Valuation	VJBKL	Lookup [Flat]
Material_Valuation	VJPEI	Lookup [Flat]
Material_Valuation	HKMAT	Lookup [Flat]
Material_Valuation	EKLAS	Lookup [Flat]
Material_Valuation	QKLAS	Lookup [Flat]
Material_Valuation	MTUSE	Text
Material_Valuation	MTORG	Lookup [Flat]
Material_Valuation	OWNPR	Boolean
Material_Valuation	BWPEI	Lookup [Flat]
Price_Control_Indicator	Name	Text
Price_Control_Indicator	Code	Text
Plants	Name	Text
Plants	Code	Text
Commodity_Codes	Name	Text
Commodity_Codes	Code	Text
MRP_Controllers	Code	Text
Scheduling_Margin_Key_for_Floats	Code	Text
Lot_Sizes	Name	Text
Lot_Sizes	Code	Text
Rounding_Profiles	Code	Text
Storage_Costs_Indicator	Code	Text
APO_relevant	Name	Text
APO_relevant	Code	Text
Dependent_Requirements	Name	Text
Dependent_Requirements	Code	Text
Planning_Strategy_Groups	Name	Text
Planning_Strategy_Groups	Code	Text
Fiscal_Year_Variants	Name	Text
Fiscal_Year_Variants	Code	Text
Period_Indicator	Name	Text
Period_Indicator	Code	Text
Valuation_Categories	Name	Text
Valuation_Categories	Code	Text
Valuation_Types	Code	Text
Valuation_Classes	Name	Text
Valuation_Classes	Code	Text
UNSPSC_Categories	Title	Text
UNSPSC_Categories	Code	Text
UNSPSC_Categories	Version	Text
UNSPSC_Categories	Key	Text
Category_Application	Name	Text
Category_Application	Code	Text
eClass	Name	Text
eClass	eClass_Number	Text
eClass	Identifier	Text
eClass	Version	Text
eClass	Key	Text
Product_Hierarchy	New_Code	Text
FinancialsProcessUsability	CompanyID	Text Normalized
FinancialsProcessUsability	PermanentEstablishmentID	Text Normalized
FinancialsProcessUsability	ProductProcessControlStatus	Lookup [Flat]
AvailabilityConfirmationProcessUsability	SupplyPlanningArea	Lookup [Flat]
AvailabilityConfirmationProcessUsability	ProductProcessControlStatus	Lookup [Flat]

AvailabilityConfirmationProcessUsability	ReplenishmentLeadTimeDuration	Measurement
AvailabilityConfirmationProcessUsability	AvailabilityConfirmationMode	Lookup [Flat]
AvailabilityConfirmationProcessUsability	GoodsIssueProcessingDuration	Measurement
Material_statistics_Groups	New_Code	Text
Material_statistics_Groups	Code	Text
Volume_rebate_Groups	New_Code	Text
Volume_rebate_Groups	Code	Text
Commission_Groups	New_Code	Text
Commission_Groups	Code	Text
Material_Pricing_Groups	New_Code	Text
Material_Pricing_Groups	Code	Text
Account_assignment_Groups	New_Code	Text
Account_assignment_Groups	Code	Text
Listing_procedure	New_Code	Text
Listing_procedure	Code	Text
Standard_cost_estimate	New_Code	Text
Standard_cost_estimate	Code	Text
Valuation_Variant	New_Code	Text
Valuation_Variant	Code	Text
Costing_Version	New_Code	Text
Costing_Version	Code	Text
ProductProcessControlStatus	New_Code	Text
ProductProcessControlStatus	Description	Text
ProductProcessControlStatus	Code	Text Normalized
SupplyPlanningArea	New_Code	Text
SupplyPlanningArea	Code	Text Normalized
SupplyPlanningArea	Description	Text
SupplyPlanningArea	SupplyPlanningAreaID	Text Normalized
SupplyPlanningArea	schemeID	Text Normalized
SupplyPlanningArea	schemeAgencyID	Text Normalized
AvailabilityConfirmationMode	New_Code	Text
AvailabilityConfirmationMode	Code	Text Normalized
AvailabilityConfirmationMode	Description	Text
FinancialsSpecification	DisplayCode	Text
FinancialsSpecification	code	Text Normalized

4.5 Business Partner EXT 1M after Qualified to Tuple Conversion

Main, Qualified **tables** and Tuple **instances** only:

Table Code	Rows in Table	Table Type
BusinessPartner	1213671	Main
BankDetails	450644	Tuple instances
PaymentCardDetails	639739	Tuple instances
Identification	1029397	Qualified tables
TaxNumber	340875	Tuple instances
PostalAddress	835857	Tuple instances
ContactPerson	340214	Tuple instances
OrganisationalAssignment	230453	Tuple instances
IndustrySector	1001063	Tuple instances
Telephone	836131	Tuple instances
Facsimile	272555	Tuple instances
Web	835447	Tuple instances
Email	836305	Tuple instances