

# **BW Modernization Webinar Series**

## **Session 4: Sizing Matters for The Cloud**

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**Public**

# SAP Datasphere Sizing Tools in a Nutshell

SAP Datasphere Sizing Tools calculate KPIs relevant for [SAP Datasphere Capacity Unit Estimator tool](#):

- Size of all tables **relevant for reporting**. The cumulated size of these tables is the minimum size of a **SAP Datasphere Storage** (256GB blocks).
- Size of all tables to be stored in **SAP Datasphere BW Bridge** (128GB blocks).
- Replication of tables in multiple SAP Datasphere spaces is **not covered** by the sizing tools.

**NOTE: All additional calculations based on cumulated table sizes (e.g. additional headroom for temp. objects) are entirely done by the Capacity Unit Estimator tool**

- E.g. by adding additional memory blocks (64GB) with increasing Compute capacity

# SAP Datasphere Capacity Unit Estimator

## SAP Datasphere Capacity Unit Estimator

Capacity Units (CU) are allocated to obtain storage and compute resources for your SAP Datasphere tenant. This estimator helps you identify suitable storage, compute, data lake, and BW Bridge sizes, and determines the number of capacity units required. Choose from the pre-defined configurations and optionally fine-tune them to your exact needs. The hourly capacity units are based on 730 hours per month.

Estimate per hour:

5,89 CU

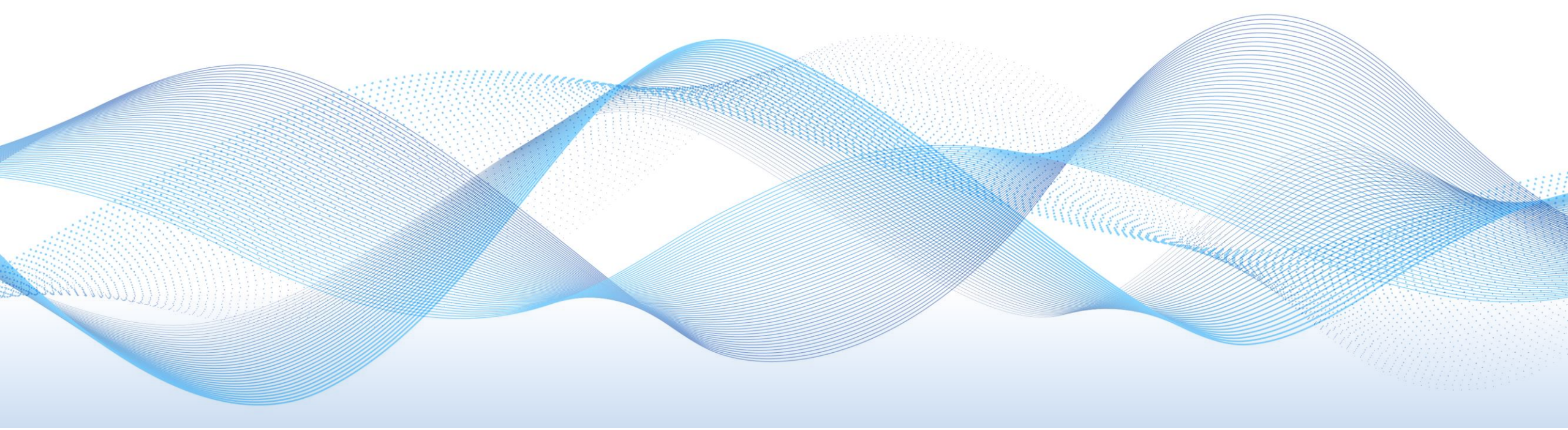
Estimate per Month:

4300 CU

[HYPERSCALER](#) [PREDEFINED CONFIGURATIONS](#) [CONFIGURATION DETAILS](#)

<b>Storage</b> A storage block is comprised of 256 GB of disk storage.	<div><div>—</div><div>1</div><div>+</div></div>	Blocks	Storage: 256 GB	0.071 CU per Hour	52 CU per Month
<b>Compute</b> A compute block is comprised of 60 GB of RAM.	<div><div>—</div><div>2</div><div>+</div></div>	Blocks	Memory: 120 GB	5.819 CU per Hour	4248 CU per Month
<b>BW Bridge</b> A BW Bridge block is comprised of 128 GB of disk storage (includes SAP BTP, ABAP environment, runtime and compute)	<div><div></div><div>0</div><div>▼</div></div>	Blocks	Storage: 0 GB	0 CU per Hour	0 CU per Month
<b>Data Lake</b> A data lake block is comprised of 5 TB of disk storage (includes data lake compute).	<div><div>—</div><div>0</div><div>+</div></div>	Blocks	Storage: 0 TB	0 CU per Hour	0 CU per Month
<b>Data Integration</b> Node hours are provided free of charge for use with Data Integration applications in the base package.	<div><div>—</div><div>1</div><div>+</div></div>	Blocks	Execution Hours: 200/month Max. Parallel Jobs: 2 Memory: 5 GB/h	0 CU per Hour	0 CU per Month
<b>Catalog</b> Storage for Catalog assets, activities, and metadata is provided free of charge in the base package.	<div><div>—</div><div>1</div><div>+</div></div>	Blocks	Storage: 1 GB/h	0 CU per Hour	0 CU per Month
<b>Catalog Crawling</b> Crawling for Catalog assets, activities, and metadata is provided free of charge in the	<div><div>—</div><div>1</div><div>+</div></div>	Blocks	Execution Hours: 100/month Max. Parallel Jobs: 1	0 CU per Hour	0 CU per Month





# **SAP Datasphere: Greenfield Sizing with SAP QuickSizer**

# SAP Datasphere Sizing in SAP Quick Sizer



- SAP Datasphere Sizing available in [HANA-based Cloud Quick Sizer](#)

# SAP Datasphere: Quick Sizer Questionnaire

Save Print page Calculate result Set to 'Final' Feedback

Project TB\_DWC

Workdays: 220 Status: In progress Method: All ☐ Show my data

Check Input Use Default Values More Details Clear Questionnaire

SAP Datasphere -> SAP Datasphere Tenant: Change

Business growth rate for disk and DB Memory:  
0 % per year

Table 1: Throughput - Definition of tables in SAP Datasphere

Delete/Clear Insert 1 line(s) Copy 1 time(s) The buttons in this line only work for marked lines in the lower table.

Element	A/P	TI	Reporting relevant	NumF.	TxtFlds	CharL.	Com.	Init. load/1000.	P. Upld/1000	Period	Unit of per.	Short text
BW_BRIDGE	A		<input checked="" type="checkbox"/>	10	10	10	5	1	50	12	Months	
BW_BRIDGE	A		<input type="checkbox"/>	20	20	10	5	10	5	365	Days	
BW_BRIDGE	A		<input checked="" type="checkbox"/>	30	30	10	5	5	10	12	Weeks	
BW_BRIDGE	A		<input checked="" type="checkbox"/>	40	40	10	5	8	20	4	Quar...	

Comment (max. 750 characters):

Questionnaire similar to ADSO input structure in well-known BW questionnaire

All tables go to SAP Datasphere BW Bridge

Tables with flag “Reporting Relevant” also go to Datasphere Space

# SAP Datasphere: QS Results: Sizing elements

Save

Result level

Sizing elements

Set to 'Final'

Feedback

Quick Sizer tool documentation

Disclaimer

Project TB\_DWC

Workdays: 220

Status: In progress

Method: All

FUEs: 0

'What-if' analysis

Separate sizing categories

Print page

All

Throughput : Results for Sizing Elements

Element	Key Capability	OSM	DB Memory in MiB	HANA Memory for Business data in MiB
BW_BRIDGE	SAP Datasphere Tenant		174	174
BW_Tenant	SAP Datasphere Tenant		48	48

Separate sizes for Datasphere Bridge and Datasphere Space storage

# SAP Datasphere: QS Results: Sizing elements

**SAP Datasphere Capacity Unit Estimator**

Capacity Units (CU) are allocated to obtain storage and compute resources for your SAP Datasphere tenant. This estimator helps you identify suitable storage, compute, data lake, and BW Bridge sizes, and determines the number of capacity units required. Choose from the pre-defined configurations and optionally fine-tune them to your exact needs. The hourly capacity units are based on 730 hours per month.

HYPERSCALER | PREDEFINED CONFIGURATIONS | **CONFIGURATION DETAILS**

Component	Description	Configuration	Capacity	CU per Hour	CU per Month
<b>Storage</b>	A storage block is comprised of 256 GB of disk storage.	1 Blocks	Storage: 256 GB	0.071 CU per Hour	52 CU per Month
<b>Compute</b>	A compute block is comprised of 60 GB of RAM.	2 Blocks	Memory: 120 GB	5.819 CU per Hour	4248 CU per Month
<b>BW Bridge</b>	A BW Bridge block is comprised of 128 GB of disk storage (includes SAP BTR, ABAP environment, runtime and compute)	2 Blocks	Storage: 256 GB	4.658 CU per Hour	3400 CU per Month
<b>Data Lake</b>	A data lake block is comprised of 5 TB of disk storage (includes data lake compute).	0 Blocks	Storage: 0 TB	0 CU per Hour	0 CU per Month
<b>Data Integration</b>	Node hours are provided free of charge for use with Data Integration applications in the base package.	1 Blocks	Execution Hours: 200/month Max. Parallel Jobs: 2 Memory: 5 GB/h	0 CU per Hour	0 CU per Month
<b>Catalog</b>	Storage for Catalog assets, activities, and metadata is provided free of charge in the base package.	1 Blocks	Storage: 1 GB/h	0 CU per Hour	0 CU per Month
<b>Catalog Crawling</b>	Crawling for Catalog assets, activities, and metadata is provided free of charge in the base package.	1 Blocks	Execution Hours: 100/month Max. Parallel Jobs: 1	0 CU per Hour	0 CU per Month

**Summary:**

- Estimate per Hour: **10,55 CU**
- Estimate per Month: **7700 CU**

**Separate sizing for DB Memory and HANA Memory for Business data in MiB:**

DB Memory in MiB	HANA Memory for Business data in MiB
174	174
48	48

174 MB Bridge size → 2 Bridge blocks of 128 GB (only 0 / 2 / 4 / 8 / 16 / 32 blocks available)

48 MB Storage Size → 1 Storage block of 256 GB

**2 Compute blocks of 64 GB each automatically added**



# SAP Datasphere: QS Results: Line results

Save

Result levelLine results + inputs

Set to 'Final'

Feedback

Quick Sizer tool documentation

Disclaimer

Project TB\_DWC

Workdays: 220Status: In progressMethod: All

FUEs: 0

'What-if' analysis

Separate sizing categories

Print page

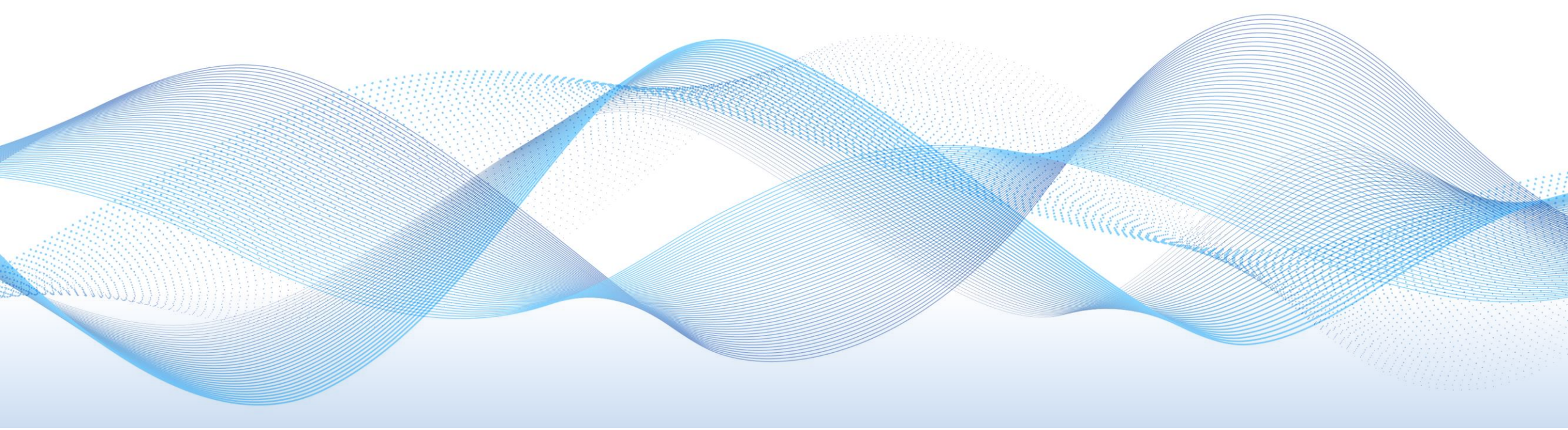
Results

All

Results per Input line

Element	Key Capability	Method	OSM	A/P	A/P-text	S.t.	E.t.	DB Memory in MiB	HANA Memory for Business data in MiB
BW_BRIDGE	SAP Datasphere Tenant	T		A	Average	08	16	22	22
BW_BRIDGE	SAP Datasphere Tenant	T		A	Average	08	16	126	126
BW_BRIDGE	SAP Datasphere Tenant	T		A	Average	08	16	14	14
BW_BRIDGE	SAP Datasphere Tenant	T		A	Average	08	16	12	12
BW_Tenant	SAP Datasphere Tenant	T		A	Average	08	16	22	22
BW_Tenant	SAP Datasphere Tenant	T		A	Average	08	16	14	14
BW_Tenant	SAP Datasphere Tenant	T		A	Average	08	16	12	12

Sizes of individual tables for Datasphere BW Bridge and tenant



# **SAP Datasphere: Brownfield Sizing with SAP BW/4HANA Sizing Report**

# **SAP Datasphere in BW/4 Sizing Report**

## **SAP Datasphere Sizing for Brownfield available with version 2.7.0 of the BW/4 Sizing Report (December 2022)**

- Datasphere Sizing is an extension of the BW/4HANA sizing report, rather than a separate sizing tool
- Sizing Report can be used either for classic BW sizing, or for SAP Datasphere sizing – but not for both at the same time

# SAP Datasphere in BW/4 Sizing Report

Relevant part of report selection screen:

<

SAP

Determine DB size relevant for BW on HANA Sizing

✓

Cancel

General

Store output in file

X

File name

HANA\_Sizing\_20230331083049.txt

Number of parallel procs

4

Unload inactive tables

X

Compliant with note 2502280

Precision

High

Medium

Low

SAP Datasphere BW Bridge Sizing

Run SAP Datasphere BW Bridge Sizing

✓

Include InfoProviders

/BHB/B4\*

to

Include InfoProviders from InfoArea

to

Exclude InfoProviders

/BHB/B4\*C\*

to

Reporting relevant InfoProviders

/BHB/B4REP\*

to

Naming pattern for InfoProviders to include (Bridge)

Additional: Naming pattern for InfoAreas with InfoProviders to include (Bridge)

Naming pattern for InfoProviders to exclude from above lists (Bridge)

InfoProviders Relevant for Reporting (Storage)

Report adds dependent objects as usual



# SAP Datasphere in BW/4 Sizing Report

Relevant output of results:

<

SAP

Determine DB size relevant for BW on HANA Sizing

✓

Cancel

Determine DB size relevant for BW on HANA Sizing

SAP DATASPHERE SIZING

=====

SAP Datasphere BW Bridge data size:

794 GiB

SAP Datasphere replicated data size:

310 GiB

SYSTEM INFORMATION

=====

Report version :

2.7.0

Execution date and time:

31.03.2023 10:45:51

# SAP Datasphere in BW/4 Sizing Report

Relevant output of results:

Determine DB size

iz

E

==

794 GiB

310 GiB

re

AT

==

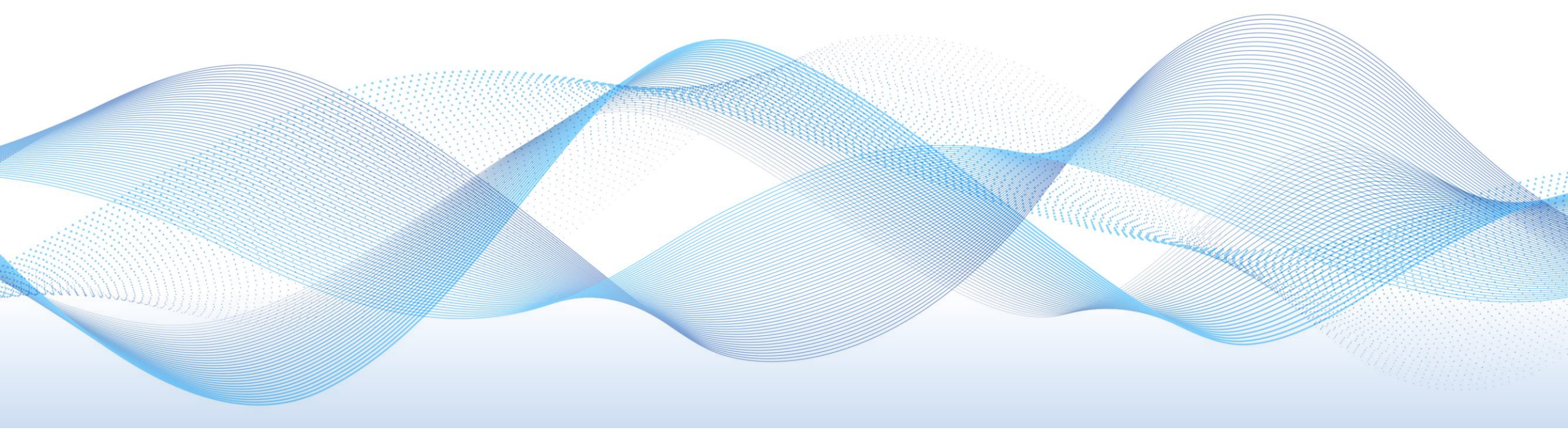
CONFIGURATION DETAILS

ⓘ Certain options are not available in all regions for all hyperscalers. [SAP note 3144215](#)

You can adjust any of the individual sizes to obtain a configuration that fits your exact needs.

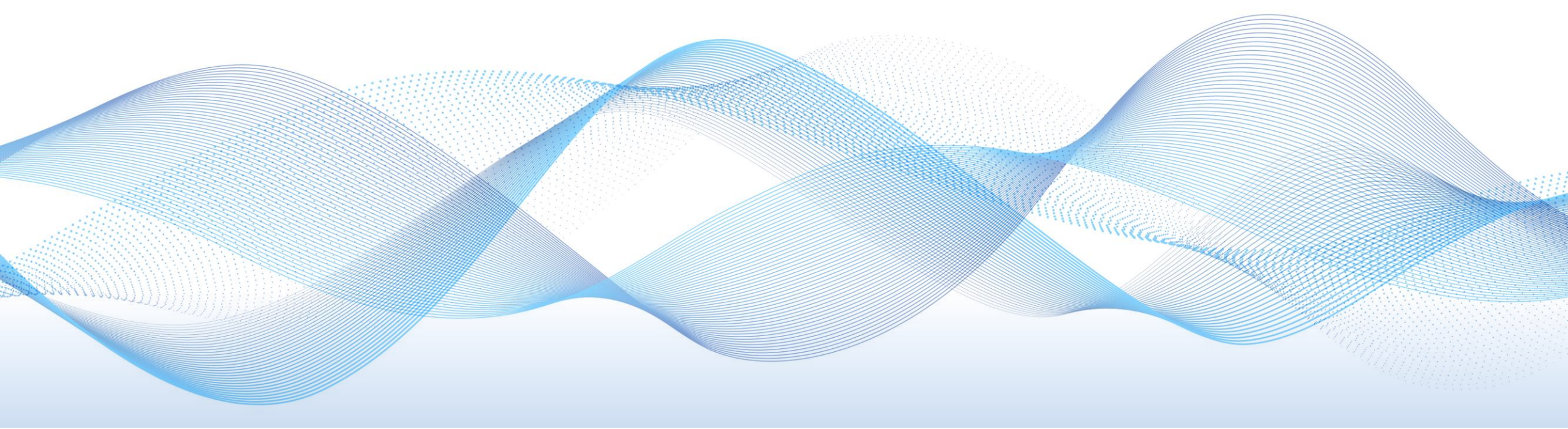
<div>Storage</div> <div>A storage block is comprised of 256 GB of disk storage.</div>	<div>−</div> <div>2</div> <div>+</div> <div>Blocks</div>	<div>Storage: 512 GB</div>	0.142 CU per Hour	104 CU per Month
<div>Compute</div> <div>A compute block is comprised of 60 GB of RAM.</div>	<div>−</div> <div>3</div> <div>+</div> <div>Blocks</div>	<div>Memory: 180 GB</div>	8.729 CU per Hour	6372 CU per Month
<div>BW Bridge</div> <div>A BW Bridge block is comprised of 128 GB of disk storage (includes data lake compute).</div>	<div>−</div> <div>8</div> <div>⌵</div> <div>Blocks</div>	<div>Storage: 1024 GB</div>	18.63 CU per Hour	13600 CU per Month
<div>Data Lake</div> <div>A data lake block is comprised of 5 TB of disk storage (includes data lake compute).</div>	<div>−</div> <div>0</div> <div>+</div> <div>Blocks</div>	<div>Storage: 0 TB</div>	0 CU per Hour	0 CU per Month
<div>Data Integration</div> <div>Node hours are provided free of charge for use with Data Integration applications in the base package.</div>	<div>−</div> <div>1</div> <div>+</div> <div>Blocks</div>	<div>Execution Hours: 200/month Max. Parallel Jobs: 2 Memory: 5 GB/h</div>	0 CU per Hour	0 CU per Month

Report version : 2.7.0  
794 GB Bridge size → 8 Bridge blocks of 128 GB (only 0 / 2 / 4 / 8 / 16 / 32 blocks available)  
310 GB Storage Size → 2 Storage blocks of 256 GB  
3 Compute blocks of 64 GB each automatically added



**DEMO:**  
SAP Datasphere Sizing  
using the BW/4HANA Sizing Report





**Don't miss this Blog on Datasphere Sizing with the  
BW/4HANA Sizing Report:**

<https://blogs.sap.com/2022/12/28/get-ready-for-sap-bw-bridge-sap-data-warehouse-cloud-sizing-report/>



# SAP BW Modernization Webinar Series

## **Session 1: Modernizing SAP Business Warehouse, Explore Your Options**

Date: September 20<sup>th</sup> @ 8am-9am PT/ 11am-12noon ET

## **Session 2: Preparation for Modernization – Your Source System**

Date: September 27<sup>th</sup> 8am-9am PT/ 11am-12noon ET

## **Session 3: Using SAP Tooling for a Smooth Transition**

Date: October 4<sup>th</sup> @ 8am-9am PT/ 11am-12noon ET

## **Session 4: Size Matters for The Cloud**

Date: October 11<sup>th</sup> @ 8am-9am PT/ 11am-12noon ET

## **Session 5: Preparation for Modernization – Your Target System**

Date: October 18<sup>th</sup> @ 8am-9am PT/ 11am-12noon ET

## **Session 6: A Deep Dive on Transition Approaches**

Date: October 25<sup>th</sup> @ 8am-9am PT/ 11am-12noon ET

## **Session 7: Working with SAP Business Warehouse Elements in SAP Datasphere**

Date: November 1<sup>st</sup> @ 8am-9am PT/ 11am-12noon ET

**[Register today!](#)**

