

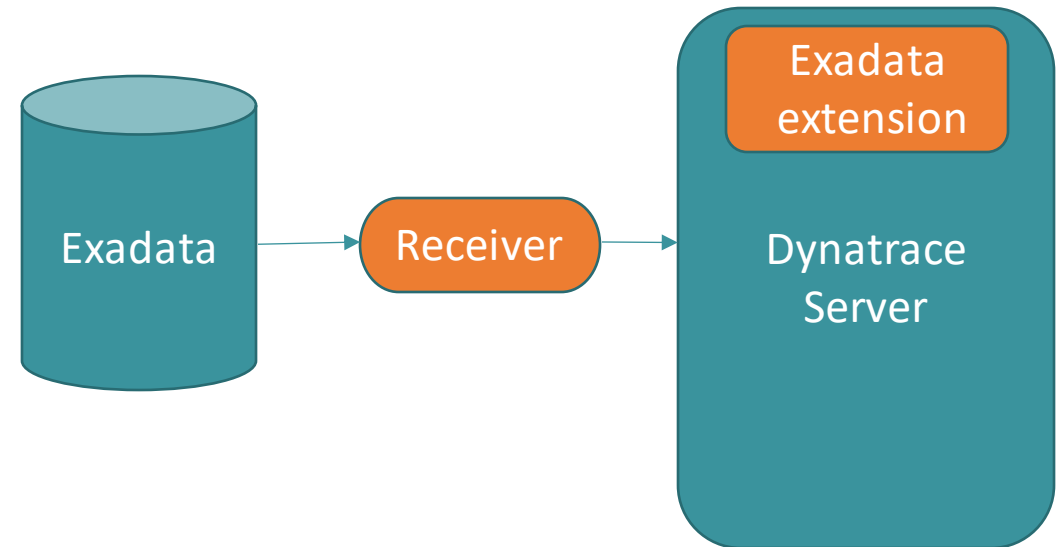
Dynatrace / Exadata

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EXADATA EXTENSION

Architecture

- Exadata Real-Time Insight exporter
 - more than 700 metrics
- Receiver (Alanata)
- Exadata extension (Alanata)



CellCLI a DBMCLI:

```
CellCLI> alter cell metricFGCollIntvlInSec=5
```

```
CellCLI> alter cell metricStreamIntvlInSec=60
```

```
CellCLI> alter cell metricStreamTags='{"fleet":"ExaPM","pod":"xd01","cluster":"c01"}'
```

```
CellCLI> alter cell metricStreamEndPoint=((host="http://receiver.domain:8080",type="json"))
```



EXADATA EXTENSION

Receiver

- Receiver for metrics from Exadata Real-Time Insight
- Conversion and pushing metrics data into Dynatrace
- Filtering

Exadata extension

- Defines entities and relations
- Metrics
- Screens
- Dashboard
- Alerts (optional)



EXADATA EXTENSION

Entity Name	Entity Path
Dynatrace Hub (1)	custom:sk.alanata.exadt
Exadata Cell (85)	/dev/shm (STORAGE : sr-ba-xed4s-t5.alanata.sk)
Exadata Cell Disk (40)	CD_02_sr_ba_xed4s_t2 (STORAGE : sr-ba-xed4s-t2.alanata.sk)
Exadata DB Server (66)	/ (KVMHOST : sr-ba-xed4a-t1.alanata.sk)
Exadata Device Mellanox (130)	re0:1:Normal_Large (STORAGE : sr-ba-xed4a-t1.alanata.sk)
Exadata Disk (291)	md25p2 (STORAGE : sr-ba-xed4s-t5.alanata.sk)
Exadata Grid Disk (60)	RECOC1_CD_01_sr_ba_xed4s_t2 (STORAGE : sr-ba-xed4s-t2.alanata.sk)
Exadata IORM Consumer Group	SYT.OTHER_GROUPS (STORAGE : sr-ba-xed4s-t2.alanata.sk)
Exadata IORM Database (119)	RKDBT (STORAGE : sr-ba-xed4s-t2.alanata.sk)
Exadata IORM Pluggable Database	SYT (STORAGE : sr-ba-xed4s-t4.alanata.sk)
Exadata IP Addr (196)	192.168.120.111:192.168.120.201:4 (GUEST : sr-ba-xed4a-t1vm1.alanata.sk)
Exadata Net Interface (25)	eth0 (STORAGE : sr-ba-xed4s-t2.alanata.sk)
Exadata Smart IO (150)	CDBT2.MOODLETD (STORAGE : sr-ba-xed4s-t2.alanata.sk)

Exadata Server instances

Exadata Server

This page shows all monitored Exadata Servers

Entities

Contains 9 Exadata Server instances.

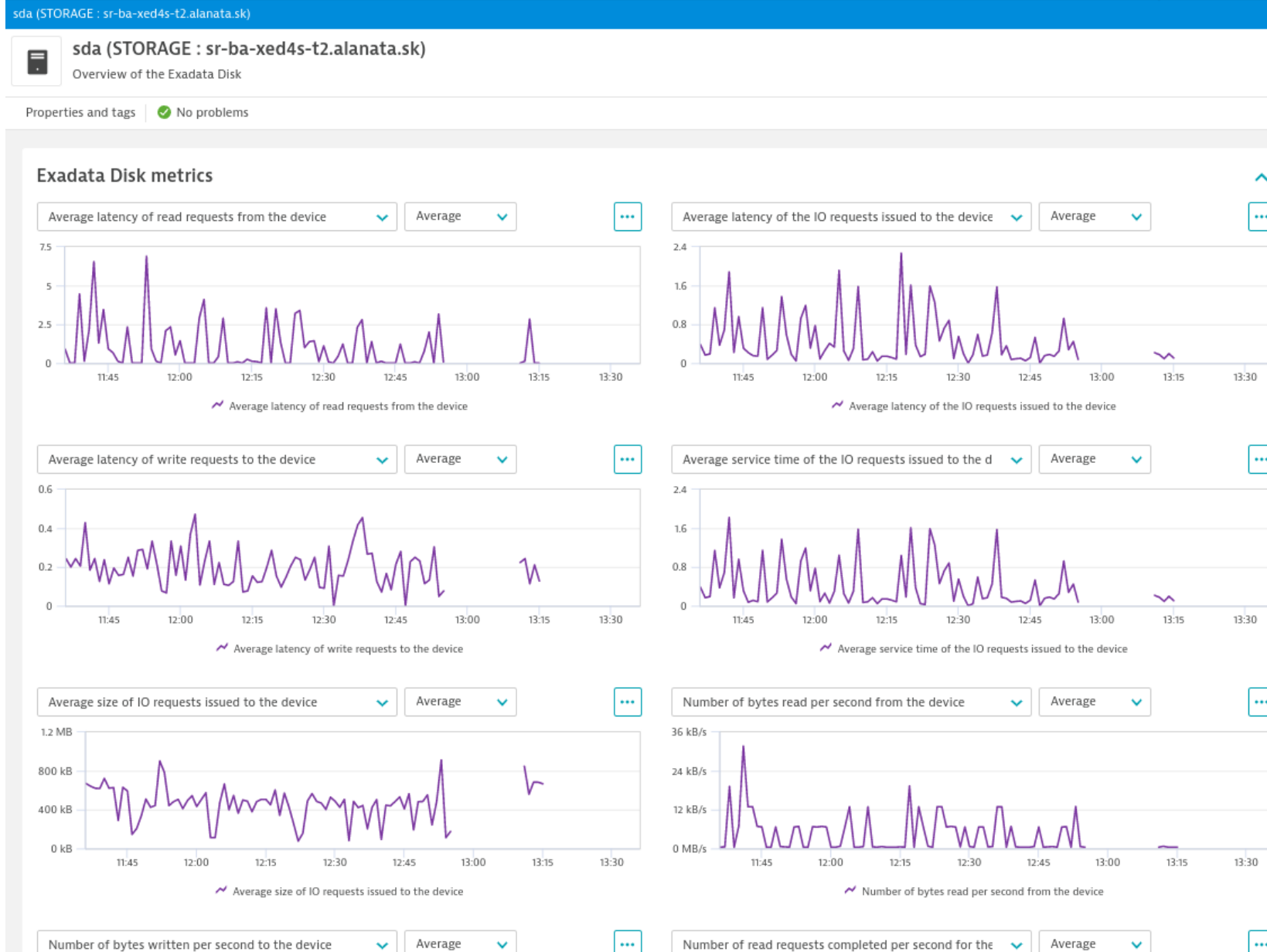
Filter by

Name

- SERVER (GUEST : sr-ba-xed4a-t1vm1.alanata.sk)
- SERVER (GUEST : sr-ba-xed4a-t2vm1.alanata.sk)
- SERVER (KVMHOST : sr-ba-xed4a-t1.alanata.sk)
- SERVER (KVMHOST : sr-ba-xed4a-t2.alanata.sk)
- SERVER (STORAGE : sr-ba-xed4s-t1.alanata.sk)
- SERVER (STORAGE : sr-ba-xed4s-t2.alanata.sk)
- SERVER (STORAGE : sr-ba-xed4s-t3.alanata.sk)
- SERVER (STORAGE : sr-ba-xed4s-t4.alanata.sk)
- SERVER (STORAGE : sr-ba-xed4s-t5.alanata.sk)



EXADATA EXTENSION



EXADATA EXTENSION

sr_ba_xed4s_t1 (STORAGE : sr-ba-xed4s-t1.alanata.sk)

sr_ba_xed4s_t1 (STORAGE : sr-ba-xed4s-t1.alanata.sk) Inactive for 1 h 40 min
Overview of the Exadata Cell



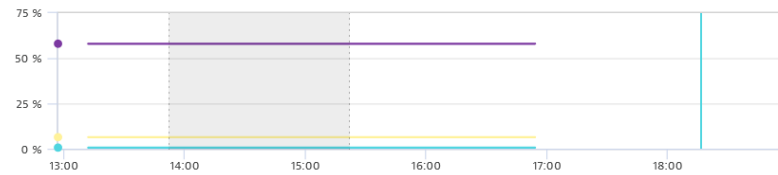
Properties and tags ✔ No problems

Filter by

Cell

Cell memory utilization

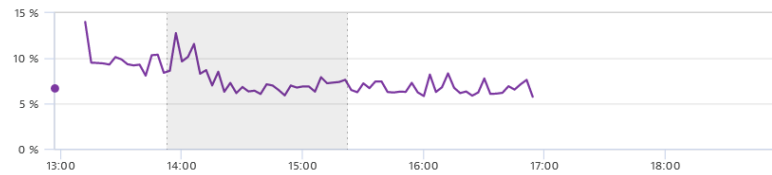
Average



~ Percentage of total physical memory on this server that is currently used
~ Percentage of physical memory used by CELLSRV
~ Percentage of physical memory used by MS

Cell CPU utilization

Average



~ Percentage of time over the previous minute that the system CPUs were not idle.

Flash Cache

Contains 1 Exadata Flash Cache.

Flash Log

Contains 1 Exadata Flash Log.

Cell Disks

Contains 8 Exadata Cell Disk instances.

Cell Filesystems

Contains 15 Exadata Cell Filesystem instances.

Filter by

Name	Filesystem Name	Percentage of total space on this file system that is currently used [Average]	Details
/ (STORAGE : sr-ba-xed4s-t1.alanata.sk)	/	50 %	✓
/boot (STORAGE : sr-ba-xed4s-t1.alanata.sk)	/boot	22 %	✓
/boot/efi (STORAGE : sr-ba-xed4s-t1.alanata.sk)	/boot/efi	4 %	✓

IORM Databases

Contains 23 Exadata IORM Database instances.

Filter by

Name	Database	oracle.exadata.D_B_FD_IO_BY_SEC [Average]	Details
ISUPT (STORAGE : sr-ba-xed4s-t1.alanata.sk)	ISUPT	0	✓
JVPEZUT (STORAGE : sr-ba-xed4s-t1.alanata.sk)	JVPEZUT	3	✓
JVPT (STORAGE : sr-ba-xed4s-t1.alanata.sk)	JVPT	0	✓
MOONLET (STORAGE : sr-ba-xed4s-t1.alanata.sk)	MOONLET	0	✓



Davis®
for Custom Device analysis

Reference signal

Percentage of time over the previous minute that the system CPUs were not idle.



2 connected signals

0.86

Exadata IORM Database
SPSVT (STORAGE : sr-ba-xed4s-t1.alanata.sk)



0.75

Exadata IORM Database
_OTHER_DATABASE_ (STORAGE : sr-ba-xed4s-t1.alanata.sk)



EXADATA EXTENSION

Exadata Overview Owned by rastislav_danis@tempest.sk One tag applied Edit

System utilization

Exadata servers

Exadata Server	CPU utilization	System load 1m	Available memory
SERVER (KVMHOST : sr-ba-xed4a-t2.al...	45.75 %	10.6	31GB
SERVER (KVMHOST : sr-ba-xed4a-t1.al...	43.77 %	10.7	31GB
SERVER (GUEST : sr-ba-xed4a-t2vm1.a...	37.22 %	7.69	72GB
SERVER (GUEST : sr-ba-xed4a-t1vm1.a...	36.00 %	6.03	74GB
SERVER (STORAGE : sr-ba-xed4s-t1.ala...	8.20 %	2.58	89GB
SERVER (STORAGE : sr-ba-xed4s-t4.ala...	7.90 %	2.39	100GB
SERVER (STORAGE : sr-ba-xed4s-t2.ala...	7.28 %	2.46	89GB
SERVER (STORAGE : sr-ba-xed4s-t3.ala...	7.17 %	2.5	89GB
SERVER (STORAGE : sr-ba-xed4s-t5.ala...	7.03 %	2.16	100GB

FlashCache usage (Top objects)

FD Util by IORM PDB

Exadata IORM Pluggable Database	oracle.exadata.PDB_CPU_UTIL_COL
CDBT1.CDB\$ROOT (STORAGE : sr-ba-xed4s-t3.alana...	0.002
CDBT1.CDB\$ROOT (STORAGE : sr-ba-xed4s-t2.alana...	0.002
CDBT2.CDB\$ROOT (STORAGE : sr-ba-xed4s-t1.alana...	0.002
CDBT2.CDB\$ROOT (STORAGE : sr-ba-xed4s-t3.alana...	0.001
CDBT1.CDB\$ROOT (STORAGE : sr-ba-xed4s-t5.alana...	0.001

FlashCache I/O (Top 10 objects)

MB of I/O per second for DB to FD

Object	13:24	13:30	13:40	14:00	14:12	14:24	14:30	14:45	15:00	15:12
SPSVT (STORAGE : sr-ba-xed4s-t5.alanata.sk)	1.4k	25.8	20.1	8.8	9.1	8.9	8.5	8.7		
SPSVT (STORAGE : sr-ba-xed4s-t2.alanata.sk)	1.9k	30.4	24.1	10.3	10.2	10.3	9.8	9.9		
JVPEZUT (STORAGE : sr-ba-xed4s-t2.alanata.sk)	3.5	2.1k	67.3	4.3	3.2	4.2	4	3.7		
JVPEZUT (STORAGE : sr-ba-xed4s-t4.alanata.sk)	3.4	2.2k	68.8	4.5	4	3.8	3.2	3.6		
JVPEZUT (STORAGE : sr-ba-xed4s-t5.alanata.sk)	3.5	2.2k	68.7	4.5	3.8	4.4	3.2	3.8		
JVPEZUT (STORAGE : sr-ba-xed4s-t3.alanata.sk)	3.4	2.2k	67.9	4.6	4.3	4.5	4	3.7		
JVPEZUT (STORAGE : sr-ba-xed4s-t1.alanata.sk)	3.8	2.3k	67.7	4.8	3.8	4.8	4.5	4.3		
SPSVT (STORAGE : sr-ba-xed4s-t4.alanata.sk)	35	2.3k	34.5	23.3	11.6	12.4	11.6	11.1		
SPSVT (STORAGE : sr-ba-xed4s-t1.alanata.sk)	2.3k	35.6	28.7	13.6	13.6	13.5	13.2	13.2		
SPSVT (STORAGE : sr-ba-xed4s-t1.alanata.sk)	41.8	2.7k	41.2	27.6	12.8	13.8	13.1	12.8	12	

FD usage by IORM CG

Exadata IORM Consumer Group

Exadata IORM Consumer Group	oracle.exadata.DB_FC_BY_ALLOCATED
JVPT.OTHER_GROUPS (STORAGE : sr-ba-xed4s-t...	0.76
_OTHER_DATABASE...ORACLE BACKGROUND GR...	0.43
JVPT.OTHER_GROUPS (STORAGE : sr-ba-xed4s-t5...	0.36
JVPT.OTHER_GROUPS (STORAGE : sr-ba-xed4s-t1...	0.33
JVPT.OTHER_GROUPS (STORAGE : sr-ba-xed4s-t...	0.31

FD usage by IORM DB

Exadata IORM Database

Exadata IORM Database	oracle.exadata.DB_FC_BY_ALLOCATED
JVPT (STORAGE : sr-ba-xed4s-t2.alanata.sk)	0.77
_OTHER_DATABASE (STORAGE : sr-ba-xed4s-t1.a...	0.44
SPSVT (STORAGE : sr-ba-xed4s-t1.alanata.sk)	0.41
JVPT (STORAGE : sr-ba-xed4s-t5.alanata.sk)	0.38
SPSVT (STORAGE : sr-ba-xed4s-t4.alanata.sk)	0.37

Average I/O load from PDB for FD

Object	13:24	13:30	13:40	14:00	14:12	14:24	14:30	14:45	15:00	15:12
CDBT1.CDB\$ROOT (STORAGE : sr-ba-xed4s-t4.alanata.sk)	0.02	0.04	0.02	0.03	0.02	0.01	0.06	...		
CDBT1.CDB\$ROOT (STORAGE : sr-ba-xed4s-t1.alanata.sk)	0.02	0.1	0.01	0.02	0.02	0.1	0.2	...		
CDBT2.CDB\$ROOT (STORAGE : sr-ba-xed4s-t2.alanata.sk)	0.02	0.03	0.03	0.7	0.2	0.01	0.02	0.01		
CDBT2.CDB\$ROOT (STORAGE : sr-ba-xed4s-t1.alanata.sk)	0.03	0.03	0.3	0.7	0.2	0.07	0.02	0.01		
CDBT2.CDB\$ROOT (STORAGE : sr-ba-xed4s-t3.alanata.sk)	0.01	0.02	0.05	1	0.5	0.02	0.06	0.01		
CDBT1.CDB\$ROOT (STORAGE : sr-ba-xed4s-t5.alanata.sk)	0.01	0.03	0.02	1.9	0.04	0.1	0.02	0.01		
CDBT1.CDB\$ROOT (STORAGE : sr-ba-xed4s-t3.alanata.sk)	0.02	0.03	0.03	2	0.06	0.02	0.06	0.01		
CDBT2.CDB\$ROOT (STORAGE : sr-ba-xed4s-t5.alanata.sk)	0.01	0.02	0.02	2.2	0.02	0.01		
CDBT1.CDB\$ROOT (STORAGE : sr-ba-xed4s-t2.alanata.sk)	0.02	0.04	0.02	2.1	0.07	0.05	0.08	0.01		

Exadata cells

Exadata Cell	System CPU Util	Physical memor...	Memory used b...	Memory used b...
sr_ba_xed4s_t1 (...)	8.20 %	58.00 %	6.42 %	0.66 %
sr_ba_xed4s_t4 (...)	7.90 %	52.00 %	6.04 %	0.66 %
sr_ba_xed4s_t2 (...)	7.28 %	58.00 %	6.40 %	0.66 %
sr_ba_xed4s_t3 (...)	7.17 %	58.00 %	6.40 %	0.66 %
sr_ba_xed4s_t5 (...)	7.03 %	52.00 %	6.03 %	0.66 %

Exadata entities

- Exadata cells
- Exadata servers
- Exadata dbservers
- Exadata IORM DBs
- Exadata IORM PDBs

Exadata servers Load 1m

Unflushed data cached in FD

3.2TB	FD_01_sr_ba_xed4s_t1 (STORAGE : sr-ba-xed4s-t1.alanata.sk) FD_01_sr_ba_xed4s_t1
3.2TB	FD_00_sr_ba_xed4s_t1 (STORAGE : sr-ba-xed4s-t1.alanata.sk) FD_00_sr_ba_xed4s_t1
3.2TB	FD_01_sr_ba_xed4s_t3 (STORAGE : sr-ba-xed4s-t3.alanata.sk) FD_01_sr_ba_xed4s_t3
3.1TB	FD_00_sr_ba_xed4s_t2 (STORAGE : sr-ba-xed4s-t2.alanata.sk) FD_00_sr_ba_xed4s_t2
3.1TB	FD_00_sr_ba_xed4s_t3 (STORAGE : sr-ba-xed4s-t3.alanata.sk) FD_00_sr_ba_xed4s_t3



Contact:

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