
 <p>भारतीय जीवन बीमा निगम LIFE INSURANCE CORPORATION OF INDIA</p>	<p>System Administrator Document</p>	 <p>Hewlett Packard Enterprise</p>
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HPE-LIC EDMS Project Enterprise Document Management System

Site Status Overview Services Partition and other usage info Environment Division DC For All Division Sites

Version: 1.11.8

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1 Disclaimer

This is a fact gathering Utility and it doesn't add,remove or modify any file on remote nodes. it just gathers facts on the remote system, all query performed on remote nodes are performed on do_admin user only. Only Cluster status required a root Access.

Note: Utility is meant to use on any Linux machine, Actual usage below is presented in Desktop LINUX VM

2 Introduction

To deliver stable and consistent performance through application services. Any application depends on the number of application services . One of the routine tasks for any System Admin to constantly monitor application and dependent service to ensure stable performance. Although sometimes it's quite difficult to monitor all application services and dependent services. This utility is meant to perform the same with ease in a presentable way

3 Purpose

Apart from regular monitoring whenever we have a scenario of unstable performance, breakdown of application services. First step towards restoring services is to identify its state is very important before we have to confirm “**ALL OK**” we have to monitor lot's of services and other component's. It's quite difficult to do this concurrently in an absolute way. Non Running of dependent service may result in unstable performance as well as data corruption. Client escalation and opened tickets are Bonus .

4 Objectives

Traditional way of verifying services is quite difficult if you have to do this a number of times in a day. Especially if you have to monitor all of them separately. IDEA behind this utility is to simplify this in order to get accurate data as per requirement.

5 Check points for the utility short

- Partition utilization across all 7 nodes per site.
- Application services on both app nodes (passive and active nodes).
- PostgreSQL services on both database nodes (passive and active nodes).
- Backup app QStar Services on only the backup server.
- Cluster status on all 4 VM's (app 2 nodes and db 2 nodes).
- OS Services on all 7 nodes per site .
- Load Averages on all 7 nodes per site.

6 Generated output report details

Scan output report will be generated in XLSX format with following format
"zone_dname_all_nodes_Site_Status_Overview_Report<date and time stamp>.xlsx"

Sample: WZ_NANDED_all_nodes_site_status_overview_21Dec-21_13_36.xlsx
The report has 2 tabs.

6.1 1st Tab will consist: Partition Utilization

All 7 nodes partition details sorted by utilization. Max used partitions will be shown on top of the list to get immediate attention and action if required.

6.2 2nd Tab will consist:- Services and other report

- Columns A to E are self explanatory.
- Column F is actual "host-name" of node
- Column E is "service category"

Service categories can be one of the below

1. Application
2. BackUP_QStar
3. Cluster
4. Database_Service
5. OS_Services
6. Processor_LoadAvg

- Column G is "service name"

Service names in general with 1 exception
'Processor_and_Load_AVG_1Min_5Min_15Min' which is actually a server load averages

- Column I is "service status"

Can be Running or NO in case of services. With 2 exception listed below.

Can be Managed or UNManaged in case of Cluster

Can be Processor_Counts:XX in case of Processor_LoadAvg . This is necessary to identify system load for the last 1 Min , 5 Min and 15 Min.

- Column J is "service PIDs" in case of found running

Can contain Service PID if found running or 'N/A' in case of not running.
In case of multiple PIDs separated with | symbol.

This Field has 1 exception in case of service category 'Processor_LoadAvg:'
it will show load averages for the last 1 Min , 5 Min and 15 Min. This will give
an overview for the last 15 Min status of the system.

- Column K is query "Connection status".

"Connected" in case successful query

"Unreachable" in case host not reachable from source

"some error" in case of any error

Images will shown on next page for better view and.

Note: Please Rotate the image pages

A	B	C	D	E	F	G	H	I	J	K	L	M
Zon	Docod	Dona	Check Date and time	Server Role	Server hostname	Filesystem Device	FS Type	Size	Use	Avail	Use %	Mounted_on
1	902	NANDEC	21-Dec-21_13_37	BackupPos	p902bk	DB_60days	fuse,mfs	91T	88T	3.0T	97%	/mnt/DB_60days
2	902	NANDEC	21-Dec-21_13_37	BackupPos	p902as01	/dev/mapper/vgimagedata01-lvimagedata2	xfs	1.0T	922G	102G	91%	/imagedata2
3	902	NANDEC	21-Dec-21_13_37	BackupPos	p902as01	/dev/mapper/vgimagedata02-lvimagedata3	xfs	1.0T	874G	150G	86%	/imagedata3
4	902	NANDEC	21-Dec-21_13_37	BackupPos	p902as01	/dev/mapper/vgimagedata01-lvimagedata1	xfs	1.0T	862G	163G	85%	/imagedata1
5	902	NANDEC	21-Dec-21_13_37	BackupPos	p902bk	/dev/sdd1	xfs	982G	754G	178G	81%	/cache
6	902	NANDEC	21-Dec-21_13_37	BackupPos	p902as01	/dev/mapper/vgeBondData-lveBondData	xfs	500G	385G	116G	77%	/eBondData
7	902	NANDEC	21-Dec-21_13_37	BackupPos	p902bk	Image_noretention	fuse,mfs	6.0T	4.4T	1.7T	73%	/mnt/Image_noretention
8	902	NANDEC	21-Dec-21_13_37	BackupPos	p902bk	/dev/mapper/vgdbdata2-lvdbdata2	xfs	1.0T	715G	310G	70%	/dbdata2
9	902	NANDEC	21-Dec-21_13_37	BackupPos	p902as01	/dev/mapper/VMM-root	xfs	30G	20G	11G	66%	/
10	902	NANDEC	21-Dec-21_13_37	BackupPos	p902bk	DB_1yr	fuse,mfs	9.8T	6.4T	3.5T	65%	/mnt/DB_1yr
11	902	NANDEC	21-Dec-21_13_37	BackupPos	p902bk	/dev/mapper/KVM-var	xfs	50G	28G	23G	55%	/var
12	902	NANDEC	21-Dec-21_13_37	BackupPos	p902as01	/dev/mapper/vgimagedata02-lvimagedata4	xfs	1.0T	491G	533G	48%	/imagedata4
13	902	NANDEC	21-Dec-21_13_37	BackupPos	p902as01	/dev/mapper/KVM-var	xfs	40G	16G	25G	40%	/var
14	902	NANDEC	21-Dec-21_13_37	BackupPos	p902bk	/dev/mapper/KVM-root	xfs	50G	19G	32G	38%	/
15	902	NANDEC	21-Dec-21_13_37	BackupPos	p902as01	/dev/mapper/vgimagedata03-lvimagedata5	xfs	1.0T	346G	679G	34%	/imagedata5
16	902	NANDEC	21-Dec-21_13_37	BackupPos	p902as02	/dev/mapper/VMM-root	xfs	30G	9.7G	21G	33%	/
17	902	NANDEC	21-Dec-21_13_37	BackupPos	p902bk	/dev/mapper/KVM-usr_local	xfs	25G	7.8G	18G	32%	/usr/local
18	902	NANDEC	21-Dec-21_13_37	BackupPos	p902bk	/dev/mapper/KVM-usr_local	xfs	25G	7.8G	18G	32%	/usr/local

Figure 1: Partition Utilization Tab1 of Output Report

	A	B	C	D	E	F	G	H	I	J	K
	Zon	Doco	Donam	Server_Rol	Date and Time	Server	Service Category	Service Name	Service Status	Service PID	Connection Status
1	de	e	e			Hostname					
2	WZ	902	NANDED	BLAppvm1	21-Dec-2021_13_35	p902as01	OS_Services	chronyd	Running	1070	Connected
3	WZ	902	NANDED	BLAppvm1	21-Dec-2021_13_35	p902as01	OS_Services	crond	Running	1466	Connected
4	WZ	902	NANDED	BLAppvm1	21-Dec-2021_13_35	p902as01	OS_Services	node_exporter	Running	1382	Connected
5	WZ	902	NANDED	BLAppvm1	21-Dec-2021_13_35	p902as01	Processor_Loadavg	processor_and_load_avg_1min_5min_15min	Processor_Counts:7	LoadAverages:1.48 1.39 1.52	Connected
6	WZ	902	NANDED	BLAppvm1	21-Dec-21_13_37	p902as01	Application	agensync	Running	24833	Connected
7	WZ	902	NANDED	BLAppvm1	21-Dec-21_13_37	p902as01	Application	DockerService	Running	24504	Connected
8	WZ	902	NANDED	BLAppvm1	21-Dec-21_13_37	p902as01	Application	epolicyinsert	Running	3327	Connected
9	WZ	902	NANDED	BLAppvm1	21-Dec-21_13_37	p902as01	Application	indocdownload	Running	28631	Connected
10	WZ	902	NANDED	BLAppvm1	21-Dec-21_13_37	p902as01	Application	jboss_eap_rhel	Running	21357	Connected
11	WZ	902	NANDED	BLAppvm1	21-Dec-21_13_37	p902as01	Application	ML_ArchivalOfEdigBonds	NO	N/A	Connected
12	WZ	902	NANDED	BLAppvm1	21-Dec-21_13_37	p902as01	Application	NewgenAlarm	Running	9535 20126	Connected
13	WZ	902	NANDED	BLAppvm1	21-Dec-21_13_37	p902as01	Application	Newgenldap	Running	12021	Connected
14	WZ	902	NANDED	BLAppvm1	21-Dec-21_13_37	p902as01	Application	NewgenScheduler	Running	9547 21874	Connected
15	WZ	902	NANDED	BLAppvm1	21-Dec-21_13_37	p902as01	Application	NewgenSMS	Running	9566	Connected
16	WZ	902	NANDED	BLAppvm1	21-Dec-21_13_37	p902as01	Application	NewgenWrapper	Running	9585 27576	Connected
17	WZ	902	NANDED	BLAppvm1	21-Dec-21_13_37	p902as01	Application	synch	Running	31795	Connected
18	WZ	902	NANDED	BLAppvm1	21-Dec-21_13_37	p902as01	Application	uploadarchival	Running	30625	Connected
19	WZ	902	NANDED	BLAppvm1	21-Dec-21_13_37	p902as01	Application	p902as	Running	27539	Connected
20	WZ	902	NANDED	BLAppvm1	21-Dec-21_13_37	p902as01	Cluster	p902as	Managed	1019	Connected
21	WZ	902	NANDED	BIDBvm2	21-Dec-2021_13_35	p902db02	Cluster	p902db	Managed	882	Connected
22	WZ	902	NANDED	BIDBvm2	21-Dec-2021_13_35	p902db02	Cluster	p902db	Managed	882	Connected

Figure 2: Services Status Tab2 of Output Report

A	B	C	D	E	F	G	H	I	J	K
39	WZ 902	MANDED	B2Appvm2	21-Dec-21 13 37	p902as02	Application	NewgenScheduler	NO	N/A	Connected
40	WZ 902	MANDED	B2Appvm2	21-Dec-21 13 37	p902as02	Application	NewgenSMS	NO	N/A	Connected
41	WZ 902	MANDED	B2Appvm2	21-Dec-21 13 37	p902as02	Application	NewgenTHM	NO	N/A	Connected
42	WZ 902	MANDED	B2Appvm2	21-Dec-21 13 37	p902as02	Application	NewgenWrapper	NO	N/A	Connected
43	WZ 902	MANDED	B2Appvm2	21-Dec-21 13 37	p902as02	Application	synch	NO	N/A	Connected
44	WZ 902	MANDED	B2Appvm2	21-Dec-21 13 37	p902as02	Application	uploadarchival	NO	N/A	Connected
45	WZ 902	MANDED	B2Appvm2	21-Dec-21 13 37	p902as02	Cluster	p902as	Managed	1064	Connected
46	WZ 902	MANDED	B2DBvm1	21-Dec-2021 13 35	p902db01	Cluster	p902db	Managed	879	Connected
47	WZ 902	MANDED	B2DBvm1	21-Dec-2021 13 35	p902db01	Database_Services	PostgreSQL	Running	18569	Connected
48	WZ 902	MANDED	B2DBvm1	21-Dec-2021 13 35	p902db01	OS_Services	chronyd	Running	897	Connected
49	WZ 902	MANDED	B2DBvm1	21-Dec-2021 13 35	p902db01	OS_Services	crond	Running	1371	Connected
50	WZ 902	MANDED	B2DBvm1	21-Dec-2021 13 35	p902db01	OS_Services	node_exporter	Running	1238	Connected
51	WZ 902	MANDED	B2DBvm1	21-Dec-2021 13 35	p902db01	Processor_LoadAvg	Processor_and_Load_Avg_1Min_5Min_15Min	Processor_Counts:6	LoadAverages:2.09 2.09 1.96	Connected
52	WZ 902	MANDED	BackupPos	21-Dec-2021 13 35	p902bk	Backup_Ostar	Ostar JB	Running	3437	Connected
53	WZ 902	MANDED	BackupPos	21-Dec-2021 13 35	p902bk	Backup_Ostar	Ostar MM	Running	3695	Connected
54	WZ 902	MANDED	BackupPos	21-Dec-2021 13 35	p902bk	Backup_Ostar	Ostar OSCSI	Running	3334	Connected
55	WZ 902	MANDED	BackupPos	21-Dec-2021 13 35	p902bk	Backup_Ostar	Ostar gwswd_server	Running	1153	Connected
56	WZ 902	MANDED	BackupPos	21-Dec-2021 13 35	p902bk	Backup_Ostar	Ostar VL	Running	3699	Connected
57	WZ 902	MANDED	BackupPos	21-Dec-2021 13 35	p902bk	OS_Services	chronyd	Running	1155	Connected
58	WZ 902	MANDED	BackupPos	21-Dec-2021 13 35	p902bk	OS_Services	crond	Running	1758	Connected
59	WZ 902	MANDED	BackupPos	21-Dec-2021 13 35	p902bk	OS_Services	node_exporter	NO	N/A	Connected
60	WZ 902	MANDED	BackupPos	21-Dec-2021 13 35	p902bk	Processor_LoadAvg	Processor_and_Load_Avg_1Min_5Min_15Min	Processor_Counts:8	LoadAverages:0.00 0.07 0.06	Connected
61	WZ 902	MANDED	Processor	21-Dec-2021 13 35	p902bk	OS_Services	chronyd	Processor	2085	Connected

Figure 3: Services Status Tab2 of Output Report 2

7 Why both active and passive node checked

In the utility we are checking both active and passive nodes. Instead we could have only checked cluster IPs like 10.XXX.XXX.10 for application service or 10.XXX.XXX.20 for database. Why are we doing this way? The Answer is we want to capture the unclean switch-over of cluster or accidental/unexpected start of service on passive nodes. It's the only reason.

8 How to use utility

Let's use utility now log in to terminal Following demonstration is from Linux upload VM not server. Lets navigate to the utility directory in the terminal . Utility directory will look like below

```
2076 root@p902vl λ (.../Developement/site_status_overview_portable 95a8291 main ? :3$ ! By: Santosh Kulkarni !)  
# ll  
total 32  
drwxr-xr-x 3 root root 240 Dec 20 15:14 Doc/  
drwxr-xr-x 2 root root 4096 Dec 21 13:36 Logs/  
drwxr-xr-x 9 root root 226 Dec 20 11:34 Module/  
-rw-r--r-- 1 root root 84 Dec 15 15:53 README.md  
drwxr-xr-x 3 root root 43 Dec 21 14:17 Report/  
-rwxr----- 1 root root 22766 Dec 21 13:20 site_status_overview_portable.sh*  
drwxr-xr-x 2 root root 6 Dec 15 15:53 Temp/  
2076 root@p902vl λ (.../Developement/site_status_overview_portable 95a8291 main ? :3$ ! By: Santosh Kulkarni !)  
#
```

Figure 4: Utility folder listing view

Lets run the utility now By involving the following command as shown in the picture below.

```
# sh site_status_overview_portable.sh
```

```
2076 root@p902vl λ (.../Developement/site_status_overview_portable 95a8291 main ? :3$ By:
# ./site_status_overview_portable.sh
=====
| SITE STATUS OVERVIEW PORTABLE | Version : 1.12.16
=====
| Utility Developed By: SANTOSH KULKARNI | Cell: 9960708564
=====
This Utility will check EDMS Server service, Partition Details , Load Averages on all nodes.
Application services and Cluster status will be checked on both AAP VM nodes
Database services and Cluster status will be checked on both DB VM nodes
Backup QStar services will be checked on BACKUP node
Partition Details and Load Averages for last 1,5,15 Minutes will be gathered on all nodes
Common OS service will be checked on all nodes
=====
Choose site for packages installation status Report
=====
NO | Zone Name (Choose ZONE)
=====
0) 0_PAN_INDIA
1) CUSTOM
2) CZ
3) ECZ
4) EZ
5) NCZ
6) NZ
7) SCZ
8) SZ
9) WZ
10) Exit
=====
Choose only zone numbers from 0 to 10 : 9
=====
You have Selected: WZ
```

Figure 5: Running the Utility Zone selection

As shown in above picture utility information is shown at top side followed by selection windows

Here we need to select the zone under which the desired site is mapped . We will select option 9 WZ zone . It will display the selected zone in green as shown in the above picture at bottom left.

As we have selected the option 9 WZ ZONE now we have to select the site status we want to check

```
-----
You have Selected: WZ
-----
NO | Division Name (Choose DONAME)
-----
0) 0_ALL_WZ_nodes
1) AHMEDABAD_all_nodes
2) AMRAVATI_all_nodes
3) AURANGABAD_all_nodes
4) BHAVNAGAR_all_nodes
5) GANDHINAGAR_all_nodes
6) GOA_all_nodes
7) KOLHAPUR_all_nodes
8) MUMBAI1_all_nodes
9) MUMBAI2_all_nodes
10) MUMBAI3_all_nodes
11) MUMBAI4_all_nodes
12) MUMBAISSS_all_nodes
13) NADIAD_all_nodes
14) NAGPUR_all_nodes
15) NANDED_all_nodes
16) NASIK_all_nodes
17) PUNE1_all_nodes
18) PUNE2_all_nodes
19) RAJKOT_all_nodes
20) SATARA_all_nodes
21) SURAT_all_nodes
22) THANE_all_nodes
23) VADODARA_all_nodes
24) Exit
-----
Choose DONAME from WZ zone Use numbers only from 0 to 24 : 15
-----
You have Selected: NANDED_all_nodes
-----
```

Figure 6: Running the Utility DONAME selection

As shown in the above picture we have to select a site by inputting the option number and all sites under the selected zone will be shown here. We will be selecting option 15 to check NANDED_all_nodes status.

Well that's all we had to do. Rest utility will do itself.

```

Choose DONAME from WZ zone Use numbers only from 0 to 24 : 15
You have Selected: NANDED_all_nodes
[INFO]: ZONE => WZ | Division => NANDED_all_nodes
[INFO]: Please wait while service query in progress..
=====
[INFO]: Service Query and summary report generation completed.
=====
[INFO]: Check generated output at following XLSX file
File Name: WZ_NANDED_all_nodes_site_status_overview_22-Dec-21_13_36.xlsx
=====
Total Time Elapsed : 0 minutes and 42 seconds.
=====
[INFO]: show_Srv_output_on_terminal is set to TRUE.
=====


| DOName | HostName | Service Category | Srv Name | Srv Status | Srv PID |
|--------|----------|------------------|----------|------------|---------|
| NANDED | k902ps01 | OS_Services      | chronyd  | Running    | 2085    |
| NANDED | k902ps01 | OS_Services      | crond    | Running    | 2948    |


```

Figure 7: Utility view on completion

Hurrey as shown in above picture utility have checked partition details on all nodes , Load Averages on all nodes , Application services on both app nodes , db services on both db nodes , Backup service on backup service and os service on all nodes . All of this in only 0 minutes and 42 seconds. Apart from this it also generated xlsx files also for further sharing and analyzing.

Apart from that it will show status on the terminal also as shown in the picture below.

DOName	HostName	Service Category	Srv Name	Srv Status	Srv PID
NANDED	k902ps01	OS_Services	chronyd	Running	2085
NANDED	k902ps01	OS_Services	crond	Running	2948
NANDED	k902ps01	OS_Services	node_exporter	Running	2921
NANDED	k902ps02	OS_Services	chronyd	Running	17088
NANDED	k902ps02	OS_Services	crond	Running	2907
NANDED	k902ps02	OS_Services	node_exporter	Running	2883
NANDED	p902as01	Application	agencysynch	Running	24833
NANDED	p902as01	Application	DocketService	Running	24504
NANDED	p902as01	Application	epolicyinsert	Running	14775
NANDED	p902as01	Application	irdocdownload	Running	28631
NANDED	p902as01	Application	jboss_eap_rhel	Running	21357
NANDED	p902as01	Application	MI_Archival0fEdigiBonds	NO	N/A
NANDED	p902as01	Application	NewgenAlarm	Running	9535 20126
NANDED	p902as01	Application	NewgenLdap	Running	12021
NANDED	p902as01	Application	NewgenScheduler	Running	9547 21874
NANDED	p902as01	Application	NewgenSMS	Running	9566
NANDED	p902as01	Application	NewgenTHM	Running	9585 27576
NANDED	p902as01	Application	NewgenWrapper	Running	31795
NANDED	p902as01	Application	synch	Running	30625
NANDED	p902as01	Application	uploadarchival	Running	27539
NANDED	p902as01	Cluster	p902as	Managed	1019
NANDED	p902as01	OS_Services	chronyd	Running	1070
NANDED	p902as01	OS_Services	crond	Running	1466
NANDED	p902as01	OS_Services	node_exporter	Running	1382
NANDED	p902as02	Application	agencysynch	NO	N/A
NANDED	p902as02	Application	DocketService	NO	N/A
NANDED	p902as02	Application	epolicyinsert	NO	N/A
NANDED	p902as02	Application	irdocdownload	NO	N/A
NANDED	p902as02	Application	jboss_eap_rhel	NO	N/A
NANDED	p902as02	Application	MI_Archival0fEdigiBonds	NO	N/A
NANDED	p902as02	Application	NewgenAlarm	NO	N/A
NANDED	p902as02	Application	NewgenLdap	NO	N/A
NANDED	p902as02	Application	NewgenScheduler	NO	N/A
NANDED	p902as02	Application	NewgenSMS	NO	N/A
NANDED	p902as02	Application	NewgenTHM	NO	N/A
NANDED	p902as02	Application	NewgenWrapper	NO	N/A
NANDED	p902as02	Application	synch	NO	N/A
NANDED	p902as02	Application	uploadarchival	NO	N/A

Figure 8: Site status report on terminal