


ETR PRODUCTION SUPPORT AND MONITORING

Change logs			
Version	Date	Updated by	Nature of change
1_1,2,3	12-Dec-14	Rajesh Maniraj	Initial version and changes
1_4	8-Feb-15	Lokesh	Included CPU Utilization, OMS Agent Monitoring
1_5	18-Aug-15	Lokesh	Updated CPU utilization, DB blocking sessions
1_6	12-Oct-15	Paari	Included PGS failover, PGS process, Architecture diagram with cloud servers, PRE-MTP server checks.
1_7	15-Oct-15	Lokesh	Added PMR instructions and troubleshooting / Must gather details.
1_8	20-Oct-15	Lokesh	Included additional details on CPU monitoring
1_9	21-Oct-15	Paari	Included HP support contacts
2.0	21-Oct-15	Lokesh	CPU threshold/lineperf.sh
2.1	23-Oct-15	Paari	Included additional details on MaxClients and DB blocking sessions.Uploaded the latest version of IBM quick reference document.
2.2	17-Nov-15	Prabu / Ananth	Included NFS details for CTO Servers. Cluster is now capable of performing site to site NFS package fail overs with minimum manual intervention on NFS clients
2.3	14-Feb-16	Sathish	Included automation of Address-Doctor Issue by identifying the error from the Servers and calculate the time taken for the issue with the order_id. Also a mail is triggered for the same to address doctor team.
2.4	25-Apr-16	Sathish	MTP Deployment Procedures for WCS, WESB, CTO/VM and OMS
2.5	16-Aug-16	Sathish / Bhagya	Included Dyna-cache clearance for prod live which is similar to stage servers, Now it can be used to clear Dyna-cache for live servers using separate script.

2.6	30-Aug-16	Sathish / DLP Team	Included Automation scripts for Akamai cache removal which will perform Akamai cache clear after getting the done file from user to clear the Akamai.
2.7	02-Oct-16	Velmurugan	Patching process automated and MI Approach Details. Both are used to reduce the time complexity of the process.
2.8	05-Oct-16	Sujai MB	Added Proxy cache clear and Pinpoint tool triage steps
2.9	18-Oct-16	Sujai MB	Added S2S Failover Visio
3.0	18-Nov-16	Sujai MB	Added IBM review (Runbook) comments
3.1	05-Sep-17	Sujai MB	Script to find and cleanup multiple catgroups for catentries in master catalog
4.0	08-Sep-17	ETR OPS	Upgraded to WCS8

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CPU Utilization:

If the CPU fluctuation is continuously high (70%, 80%), then it has to be taken care by checking App server SystemOut logs.

Threshold limit set in Sitescope-

When the utilization reaches “between” **40% to 70 %** in any of the server, an internal alert email would be triggered from site scope.



Status WARNING
ETR PRODUCTION I



Group

ETR_PROD_CPU Mor



Status WARNING

ETR PRODUCTION I

Below support PDL will get the internal alert:

PDL-TCS-INTERNAL-PRODSUPPORT pdl_tcs_prodsupport@hp.com

If the alert reaches **70%** another alert email will be triggered from sitescope with larger audience.



Status ERROR
ETR PRODUCTION Li

The below recipients will get the notification email if any monitor fails or error'd out.

B2C eTR Dev Engineering <B2C_eTR_Dev_Engineering@hp.com>;

ETR-TCS-PRODSUPPORT <pdl_tcs_prodsupport@hp.com>

Log collection-

If the average cpu utilization reading by the monitor has been above 70% two times in a row, the log collection (linperf-performance.sh) will be triggered automatically to collect the must gather logs and it will be shared to Dev / IBM.

For uploading logs to IBM FTP server, please refer page 25.

Also, we have automated script to collect top CPU consuming process in all prod live app servers and it will send us a report for every 30 mins.



g1t7200 austin
hpicorp net - Top m

Thread Dump: (Only Java core if needed)

An automatic script has been written to take the thread dump in application servers when required.

Script is in **7207c Arcsight server** at </opt/apps/scripts/WCS/threaddump.sh>

While running the script, you need to enter the details like server name in which you are going to take thread dump, no.of times the dump to be taken, time interval for each dump and your hp mail id. Once you entered all these details, it will start to take thread dump and will mail you the details of the thread dump taken (PFA), after completion. In case you have not got the mail you can track the details of the thread dump in taken in file generated in the same **7207c server** at the location **/opt/apps/scripts/WCS/logs**

```
[wcsuser@gl7207c WCS]$ ./threaddump.sh

Server name to take thread dump
gl7204.austin.hpibcorp.net

No.of times to take dump
2

Time interval for each dump(in seconds)
20

e-mail id to send thread dump status mail
madhubala.k@hpib.com

Need CPU utilization report(y/n):
n

Logged into gl7204.austin.hpibcorp.net

----- Thread dump activity started -----

Thread dump was taken for 1 times at 2017-09-11 10:48:36

Thread dump was taken for 2 times at 2017-09-11 10:48:56

Zipping thread dump files as gl7204.javacore-cpu_report_2017-09-11_10:48:16.zip
zip warning: name not matched: cpu_usage_report_28607_2017-09-11_10:48:16.txt
zip warning: name not matched: cpu_usage_report_61506_2017-09-11_10:48:16.txt
adding: javacore.20170911.104836.28607.0006.txt (deflated 89%)
adding: javacore.20170911.104836.61506.0006.txt (deflated 89%)
adding: javacore.20170911.104816.28607.0005.txt (deflated 89%)
adding: javacore.20170911.104816.61506.0005.txt (deflated 89%)
rm: cannot remove `cpu_usage_report_28607_2017-09-11_10:48:16.txt': No such file or directory
rm: cannot remove `cpu_usage_report_61506_2017-09-11_10:48:16.txt': No such file or directory

----- Thread dump activity completed -----
```

Please collect must gathers and report it to IBM for validation.

<http://www.ibm.com/support/docview.wss?uid=swg21115785>

WebSphere Application Server Problems

MustGather: Read First for WebSphere Application Server (reference only):

<http://www.ibm.com/support/docview.wss?uid=swg21145599>

Symptoms: High volume periods

MustGather: Performance, hang, or high CPU issues with WebSphere Application Server on Linux:

<http://www.ibm.com/support/docview.wss?uid=swg21115785>

Symptoms / Scenarios: High CPU, hang or performance problems

Initial Analysis / Trouble shooting:

- Check whether any specific job is running on the server which utilizes max cpu
- Collect must gather logs from the specific server and share it to dev team / IBM.

If the utilization is around 40 %(warning), check whether any job is utilizing the server's CPU. Wait for 2 mins to see the utilization reduces or else report the problem.



Group
ETR_PROD_CPU Mor

Monitor:



Group
ETR_PROD_CPU Mor

Support contact:

- ETR-WCS-TCS etr-wcs-tcs@hp.com
- IBM via PMR

Reports configured in sitescope:



Group
ETR_PROD_CPU Mor

Monitor has been configured in sitescope to watch the CPU utilization and it will alert the group if the utilization reaches above 40%.

There is an automatic report been scheduled in sitescope, where we receive the min/max CPU usage for every hour.

Cron job to grep for “hung thread” message in system out log – use timestamp to alert on current event only)

Tools Used: Site Scope

Note – We can pull historical CPU utilization report for all production servers from sitescope for cross comparison.

Ping / Proc alerts:

Symptom:

The server would not respond or the server would be down. An alert email will be triggered from sitescope when the server doesn't respond.

Initial Analysis / Trouble shooting:

There could be wrong with the routers or the network is very busy. So when an alert received, ping the server and confirm.

There is a monitor configured in the sitescope, where it will monitor the ping / proc status for all the production servers.

```
D:\Users\ravipati>ping g1t7200.austin.hplicorp.net

Pinging g1t7200.austin.hplicorp.net [15.69.49.133] with 32 bytes of data:
Reply from 15.69.49.133: bytes=32 time=68ms TTL=57
Reply from 15.69.49.133: bytes=32 time=68ms TTL=57
Reply from 15.69.49.133: bytes=32 time=67ms TTL=57
Reply from 15.69.49.133: bytes=32 time=67ms TTL=57

Ping statistics for 15.69.49.133:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 67ms, Maximum = 68ms, Average = 67ms

D:\Users\ravipati>
```

There are time, where the server may be went down. Immediately check and make the servers up and running. Or else raise a HPSM ticket to the unix team for the action and root cause.

To find the status of an application/IHS server, we can login in to the IBM console and check the status.

The screenshot shows the IBM WebSphere Administration Console interface. The main content area is titled 'Application servers' and contains a table listing the status of various application servers. The table has columns for 'Select', 'Name', 'Node', 'Host Name', 'Version', 'Cluster Name', and 'Status'. The 'Status' column shows green arrows, indicating that all servers are running. The left sidebar shows the navigation tree with 'Servers' selected. The top bar shows 'Welcome configadmin' and 'Help | Logout'.

Select	Name	Node	Host Name	Version	Cluster Name	Status
<input type="checkbox"/>	server1	g2t5188_node	g2t5188.austin.hplicorp.net	ND 8.5.5.11	CommerceCluster	➔
<input type="checkbox"/>	server1	g1t7204_node	g1t7204.austin.hplicorp.net	ND 8.5.5.11	CommerceCluster	➔
<input type="checkbox"/>	server1	g1t7205_node	g1t7205.austin.hplicorp.net	ND 8.5.5.11	CommerceCluster	➔
<input type="checkbox"/>	server1	g2t5187_node	g2t5187.austin.hplicorp.net	ND 8.5.5.11	CommerceCluster	➔
<input type="checkbox"/>	server2	g2t5188_node	g2t5188.austin.hplicorp.net	ND 8.5.5.11	CommerceCluster	➔
<input type="checkbox"/>	server2	g1t7204_node	g1t7204.austin.hplicorp.net	ND 8.5.5.11	CommerceCluster	➔
<input type="checkbox"/>	server2	g1t7205_node	g1t7205.austin.hplicorp.net	ND 8.5.5.11	CommerceCluster	➔
<input type="checkbox"/>	server2	g2t5187_node	g2t5187.austin.hplicorp.net	ND 8.5.5.11	CommerceCluster	➔
<input type="checkbox"/>	server3	g2t5188_node	g2t5188.austin.hplicorp.net	ND 8.5.5.11	CommerceCluster	➔
<input type="checkbox"/>	server3	g1t7204_node	g1t7204.austin.hplicorp.net	ND 8.5.5.11	CommerceCluster	➔

<https://g1t7204.austin.hplicorp.net:9043/ibm/console> Websphere Integrated Solution Console

Support contact:

- Raise HPSM ticket to UNIX support for the root cause.

Tools Used: Site Scope

CPU Starvation:

Symptom:

The appserver will go down, when CPU starvation is detected. An alert email will be triggered from sitescope when the server doesn't respond.

Log collection-

If the average cpu starvation reading by the monitor has been above 70% two times in a row, the log collection (linperf-performance.sh) will be triggered automatically to collect the must gather logs and it will be shared to Dev / IBM.

Please check App server SystemOut logs for CPU Starvation error messages.

```
*****
[travipati@g1t7204 ~]$ pbrun su - wcsuser
[wcsuser@g1t7204 ~]$ locate SystemOut.log
/opt/apps/IBM/WebSphere/AppServer/profiles/Dmgr01/logs/dmgr/SystemOut.log
/opt/apps/IBM/WebSphere/AppServer/profiles/Dmgr01/logs/dmgr/SystemOut.log.owner
/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/logs/nodeagent/SystemOut.log
/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/logs/nodeagent/SystemOut.log.owner
/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/logs/server1/SystemOut.log.owner
/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/logs/server1/g1t7204_svr1_SystemOut.log
/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/logs/server1/g1t7204_svr1_SystemOut.log.owner
/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/logs/server2/SystemOut.log
/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/logs/server2/SystemOut.log.owner
/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/logs/server2/g1t7204_svr2_SystemOut.log
/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/logs/server2/g1t7204_svr2_SystemOut.log.owner
/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/logs/server2/g1t7204_svr2_SystemOut.log.owner
/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/logs/server3/SystemOut.log
/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/logs/server3/SystemOut.log.owner
/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/logs/server3/g1t7204_svr3_SystemOut.log
/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/logs/server3/g1t7204_svr3_SystemOut.log.owner
[wcsuser@g1t7204 ~]$ cd /opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/logs/server1/
```

```

4 -rw-r----- 1 wcsuser wcsgroup 3764 Sep 6 09:53 btrace.1
944 -rw-r----- 1 wcsuser wcsgroup 959891 Sep 6 09:58 glt7204_svr1_SystemErr_17.09.06_10.00.00.log
5712 -rw-r----- 1 wcsuser wcsgroup 5843504 Sep 6 09:59 glt7204_svr1_SystemOut_17.09.06_10.00.00.log
344 -rw-r----- 1 wcsuser wcsgroup 344217 Sep 6 10:59 glt7204_svr1_SystemErr_17.09.06_11.00.00.log
6604 -rw-r----- 1 wcsuser wcsgroup 6757012 Sep 6 10:59 glt7204_svr1_SystemOut_17.09.06_11.00.00.log
148 -rw-r----- 1 wcsuser wcsgroup 143439 Sep 6 11:56 glt7204_svr1_SystemErr_17.09.06_12.00.00.log
8888 -rw-r----- 1 wcsuser wcsgroup 9096887 Sep 6 11:59 glt7204_svr1_SystemOut_17.09.06_12.00.00.log
440 -rw-r----- 1 wcsuser wcsgroup 443605 Sep 6 12:31 glt7204_svr1_SystemErr.log
135900 -rw-r----- 1 wcsuser wcsgroup 139157478 Sep 6 12:31 glt7204_svr1_trace.log
6304 -rw-r----- 1 wcsuser wcsgroup 6447844 Sep 6 12:31 glt7204_svr1_SystemOut.log
[wcsuser@glt7204 server1]$ tail -f glt7204_svr1_SystemOut.log

```

```

wcsuser@glt7204 server1]$ tail -f glt7204_svr1_SystemOut.log
    at com.ibm.io.async.ResultHandler.complete(ResultHandler.java:204)
    at com.ibm.io.async.ResultHandler.runEventProcessingLoop(ResultHandler.java:775)
    at com.ibm.io.async.ResultHandler$2.run(ResultHandler.java:905)
    at com.ibm.ws.util.ThreadPool$Worker.run(ThreadPool.java:1892)

End of exception traces.

[9/6/17 13:00:45:706 UTC] 0000011a ProcessLogonC E com.hp.commerce.usermanagement.commands.ProcessLogonCmdImpl performExecute (icmonti@hotmail.com) User not exists in hpp & not SMB Legacy User.
[9/6/17 13:00:45:706 UTC] 0000011a CommerceSrvr A com.hp.commerce.usermanagement.commands.ProcessLogonCmdImpl performExecute (icmonti@hotmail.com) Check your email and password and try again.
[9/6/17 13:00:45:706 UTC] 0000011a ExtendedInfo I CWXFR9010I: Extended information : [URL=https://store.hp.com/webapp/wcs/stores/servlet/webapp/wcs/stores/servlet/ProcessLogon] [parameters=storeId=10151 logonPassword=***** categoryId=rememberMe=true catalogId=-1 logonId=icmonti@hotmail.com ] [userId=-1002]

```

Monitor: Grep SystemOut logs for exceptions which could provide the exceptions regarding starvation.

Application server need to restart for this CPU starvation issue.

Support contact:

- ETR-WCS-TCS etr-wcs-tcs@hp.com
- IBM via PMR

Tools Used: Site Scope

DB Table Space Issue & DB sql blockings:

Symptom:

We will get an email from sitescope, when the db tablespace reaches the threshold limit.

Action:

Drop mail to DBA team to add more space.

Symptoms on DB blocking session:

A cron job has been scheduled to monitor the blocking sessions in the production app servers.



PROD STG WCS DB
Blocking Sessions v

Action:

Before killing the session, take high CPU MustGather / AWR & ADDM reports and share it to TCS DEV and IBM to analyze the issue.

Note: MustGather should be capture for all JVMs.

MustGather: Performance, hang, or high CPU issues with WebSphere Application Server on Linux:

<http://www.ibm.com/support/docview.wss?uid=swg21115785>

Symptoms / Scenarios: High CPU, hang or performance problems

Support contact:

- **IMAP POE GDBA DOC Oracle** < imap.poe.doc.oracle@hp.com >
- ETR-WCS-TCS etr-wcs-tcs@hp.com
- IBM via PMR

Tools: Pulse Check/Site Scope

DBPulsecheck -

[http://databases.corp.hp.com/pulsecheck/\(S\(slucuhajikapq1c0eymskvfv\)\)/default.aspx](http://databases.corp.hp.com/pulsecheck/(S(slucuhajikapq1c0eymskvfv))/default.aspx)

ApproachingMaxClients:**Symptoms:**

Site not responding / slowness, app server / IHS server might not respond.

When the servers are approaching maximum limit, the app servers and web servers need to be restarted. Connections are not being released which is why MaxClients is being reached.

<http://www.ibm.com/support/docview.wss?uid=swg21141306>

Suggestion from IBM:

IHS Max Clients issues are usually from a back end system not responding which causes more threads to wait. It may not be useful to restart IHS without addressing issues in the back end systems.

Before restarting the web servers, an analysis of what modules the client threads are busy in should be done using mpmmstats data (presuming mpmmstats is loaded). If mpmmstats is not loaded, it should be **which would have to wait until after peak**. It can provide critical data and historical load information.

Action:

Symptoms / Scenarios: Content from application server not displaying

- Monitor the Web container thread active per JVM
- No. of JDBC connections per JVM
- Monitor the response time -

MustGather: Read First for IBM HTTP Server (reference only):

<http://www.ibm.com/support/docview.wss?uid=swg21192683>

•MustGather: Request failures accessing static content on IBM HTTP Server:

<http://www.ibm.com/support/docview.wss?uid=swg21666407>

•Symptoms / Scenarios: Content in Web server layer (not application server) not displaying

•MustGather: Request failures accessing WebSphere Application Server dynamic content through IBM HTTP Server:

<http://www.ibm.com/support/docview.wss?uid=swg21141306>

Monitor: Greperror log for "reached MaxClients" or "approaching MaxClients". Also, you can write a script to check for slow responses by defining a threshold, grepping on request ID and flagging any transaction that does not have a successful completion code within your defined threshold.

Run the below commands in the Arcsight server (g1t7207c.austin.hplicorp.net) to find out the busy threads.

/opt/apps/NFS/Pro/ETRLive/logs/WCS/IHS

Run this is command in all IHS server directory, Replace the log file with previous date.

```
grep "MaxClients" error_log.2017-07-28* | awk -v varTime=`date -d "now 24 hours ago" +%a %b %d %H:%M` -F'[ ]' '{ if ( $2 >= varTime ) print $0 }' | awk -F[ ] '{ print $1 $3 }' | sort -k4 -nr
```

```
grep "mpmstats: rdy" error_log.2017-07-28* | awk -v varTime=`date -d "now 24 hours ago" +%a %b %d %H:%M` -F'[ ]' '{ if ( $2 >= varTime ) print $0 }' | awk -F[ ] '{ print $2 $3 }' | awk -F[ ] '{ print $1 $3 }' | awk '$10>0' | sort -k4 -nrs
```



Thu 9/7/2017 5:30 PM

etrsupportstream@hp.com

Last 1 hour TOP 10 MPMSTATS of Prod Live WCS_CTO servers | 2017-09-07-12 UTC

To ETR Operations Support

Cc ETR Operations Support; Durairaj, Sathish; S, Lakkumanan

We removed extra line breaks from this message.

TOP 10 MPM Stats [Sorted by bsy threads]

```
=====
g1t7203g.austin.hp.com| Sep 07 11:28:12 2017| mpmstats: rdy 134 bsy 66 rd 0 wr 4 ka 58 log 0 dns 0 cls 4
g1t7203g.austin.hp.com| Sep 07 11:02:11 2017| mpmstats: rdy 160 bsy 40 rd 0 wr 8 ka 31 log 0 dns 0 cls 1
g2t5185g.austin.hp.com| Sep 07 11:18:33 2017| mpmstats: rdy 164 bsy 36 rd 1 wr 4 ka 31 log 0 dns 0 cls 0
g2t5184g.austin.hp.com| Sep 07 11:37:28 2017| mpmstats: rdy 164 bsy 36 rd 0 wr 6 ka 30 log 0 dns 0 cls 0
g2t5184g.austin.hp.com| Sep 07 11:05:25 2017| mpmstats: rdy 166 bsy 34 rd 0 wr 8 ka 26 log 0 dns 0 cls 0
g1t7203g.austin.hp.com| Sep 07 11:01:11 2017| mpmstats: rdy 166 bsy 34 rd 0 wr 5 ka 28 log 0 dns 0 cls 1
g1t7202g.austin.hp.com| Sep 07 11:50:18 2017| mpmstats: rdy 167 bsy 33 rd 0 wr 6 ka 27 log 0 dns 0 cls 0
g1t7202g.austin.hp.com| Sep 07 11:03:15 2017| mpmstats: rdy 167 bsy 33 rd 1 wr 6 ka 25 log 0 dns 0 cls 1
g1t7202g.austin.hp.com| Sep 07 11:01:15 2017| mpmstats: rdy 167 bsy 33 rd 0 wr 6 ka 27 log 0 dns 0 cls 0
g1t7203g.austin.hp.com| Sep 07 11:05:11 2017| mpmstats: rdy 169 bsy 31 rd 2 wr 2 ka 27 log 0 dns 0 cls 0
=====
```

Thanks,
ETR Operations Team

-This is automated mail, for queries please mail to pd1_tcs_prodsupport@hp.com.



http Server
MaxClient Report.doc

A script has been written to check the threshold and has been automated. When that reaches the threshold then the app servers and web servers needs to be restarted to release the ideal connections.

Monitor: Grep error log for "reached MaxClients" or "approaching MaxClients". Also, you can write a script to check for slow responses by defining a threshold, grepping on request ID and flagging any transaction that does not have a successful completion code within your defined threshold.

Support contact:

- ETR-WCS-TCS etr-wcs-tcs@hp.com
- IBM via PMR

Tools: Site Scope

Out of Memory Exceptions:

Action:

- Native_stderr.log
- Javacore
- Heapdump

- JVM core dump upon OOM (<https://developer.ibm.com/answers/questions/184986/how-can-i-manually-generate-javacores-on-websphere/>)

Tools: Site Scope

Timed Out Exceptions:

<http://www.ibm.com/support/docview.wss?uid=swg21254645>

Action:

1. Does it happen for a specific operation? Has anything changed to that operation?
2. How much it takes in general for that operation to complete vs. transaction timeout?
3. Does it happen for all operation during a period of time? Is there a pattern when this happen?

That means server could be slow... then you want to take High CPU Must Gather native_stderr.log

Symptoms / Scenarios: Database Connection timeout / failure

When there are db blocking sessions, we might get the time out exceptions. Please check for the automated alert emails on the db blocking sessions and kill the sql blockings.

Monitor: Cron job to detect errors when JDBC connections fail (“J2CA0045E” or “ConnectionWaitTimeoutException”) OR monitor number of JDBC connections and set alert threshold. Cron job to grep for “hung thread” message in system out log – use timestamp to alert on current event only)

While enabling trace in production for any triaging activity, make sure the trace are enabled only during non-business hours or low traffic hours; so that it won’t affect the site. Enable trace in “Runtime” so that it won’t require server restart

Tools: Site Scope

Alert for LiveSiteURLs (30 sec error, 20 sec warn):

When a particular store url is taking long time to load, we will receive a sitescope alert.

This might be due connection timeout or a webserver might be down.

Particular web server is down. So would act to bring it back up. We raise a HPSM ticket against UNIX team to get the RCA.

Webserver	AppServer:Port	URL	Resp_Code	Time_taken(seconds)	Resp_size(bytes)
g2t5184g.austin.hp.com	g1t7205.austin.hp.corp.net:9063	/us/en/ProcessLogon	200	59.735	370
g1t7202g.austin.hp.com	g2t5188.austin.hp.corp.net:9088	/us/en/ManagePrintersView	200	50.4407	112028
g1t7203g.austin.hp.com	g1t7205.austin.hp.corp.net:9063	/webapp/wcs/stores/servlet/ManagePrintersView	200	46.2743	111851
g2t5185g.austin.hp.com	g2t5188.austin.hp.corp.net:9088	/us/en/ManagePrintersView	200	43.6131	112029
g2t5185g.austin.hp.com	g1t7204.austin.hp.corp.net:9088	/us/en/HPServices	200	41.4541	8637
g1t7203g.austin.hp.com	g2t5188.austin.hp.corp.net:9088	/us/en/HPServices	200	40.4382	8642
g1t7203g.austin.hp.com	g2t5188.austin.hp.corp.net:9063	/us/en/mlp/ink--toner---paper/toner-cartridges	200	35.3841	223517
g1t7203g.austin.hp.com	g2t5187.austin.hp.corp.net:9114	/webapp/wcs/stores/servlet/HPCTOServices	200	34.0327	62008
g1t7203g.austin.hp.com	g2t5188.austin.hp.corp.net:9063	/us/en/mdp/business-solutions/server-options	200	30.9227	445406
g2t5184g.austin.hp.com	g2t5188.austin.hp.corp.net:9063	/us/en/pdp/hp-95-tri-color-original-ink-cartridge-p-c8766wn-140-1	200	29.707	164445
g1t7203g.austin.hp.com	g1t7205.austin.hp.corp.net:9114	/webapp/wcs/stores/servlet/HPCTOServices	200	29.1423	62008
g2t5185g.austin.hp.com	g1t7205.austin.hp.corp.net:9088	/us/en/HPServices	200	23.7623	8637
g2t5185g.austin.hp.com	g1t7205.austin.hp.corp.net:9063	/webapp/wcs/stores/servlet/ProcessLogon	200	23.3199	412
g2t5185g.austin.hp.com	g2t5188.austin.hp.corp.net:9114	/us/en/mlp/business-solutions/accessories-240509-1	200	23.224	133349
g2t5185g.austin.hp.com	g2t5188.austin.hp.corp.net:9114	/webapp/wcs/stores/servlet/HPCTOServices	200	22.9138	269530

Will be receiving an automated mail attached above, which clearly describes the seconds taken to land the page.

Tools: Site Scope.

Thread Monitoring:

Get the process Id which is running with more memory (Top running process) and convert the number to Hexadecimal and find in the thread dump. From that we can get the top running thread which is consuming more memory.

Disk Space Alert:

Symptom:

An alert mail is set when the threshold reach 40%.



Status WARNING
ETR PRODUCTION I

Action:

Have to clear the logs or archive it from opt/apps before reaching the actual threshold value 80%

Tools: Site Scope.

PROD File:

Symptom:

We have a sitescope alert configured, when access_log or error_log didn't generate for the current hour an automated email will be triggered for that.



Status ERROR
ETR PRODUCTION E

Action:

The log file will be generated late by 5 to 10 mins in the server. For this issue we had changed the session interval from 600 to 60 in the httpd.conf file, so that there will not be gap in the log generation.

Even though after this change we are getting new alerts on this. These alerts will be generated only during non-business hours.

The below are the reason for the time delay.

If the lack of traffic on it is still causing it to not generate the modules

OMS Agent Monitoring:

When we get a proc alert on a particular agent in the agent server, we should login in to the agent server check for that particular agent. If the agent is not running or stoped by case, need to start the agent.



Status ERROR
ETR PRODUCTION S

```
cd /opt/apps/IBM/scripts
```

```
./startagents.sh <agentname>
```

Starting point for Sterling products

•Sterling Selling and Fulfillment Suite (SSFS) List of MustGathers:

<http://www.ibm.com/support/docview.wss?uid=swg21673807>

Sterling Commerce Performance Problems

•IBM Sterling Commerce -Performance MustGather:

<http://www.ibm.com/support/docview.wss?uid=swg21614185>

•Symptoms / Scenarios:

•Application / Agent / Integration Server Frozen or Non-Responsive

•Application / Agent / Integration Server Crashed or Shutdown

- Application / Agent / Integration Server Deadlocks
- Agent / Integration Server Very Slow or Backlog of messages
- DatabaseSlow Query Response

•**Sterling Performance Blocking**

MustGather:<http://www.ibm.com/support/docview.wss?uid=swg21670465>

- Symptoms / Scenarios:
- All processesDatabase -Too many blocking locks
- All processesThread Dumps / Stuck Threads

Sterling CPQ

- Sterling Configure Price Quote

MustGather:<http://www.ibm.com/support/docview.wss?uid=swg21674326>

- Symptoms / Scenarios:
- Problems with Configuration of Products (CTO)
- Problems with Visual Modeler (Dev Environment)

Agent / Integration Servers (JVM)

- Sterling Agent Error MustGather:<http://www.ibm.com/support/docview.wss?uid=swg21674306>
- Symptoms / Scenarios:
- Non Performance related problems
- Functionality Related issues
- Orders not getting released / scheduled
- Purge related problems
- Integration with backend systems Functional Problems

OMS -Inventory Related RTAM Problems

- Sterling RTAM MustGather:

<http://www.ibm.com/support/docview.wss?uid=swg21674311>

OMS -Inventory Related Problems (Not RTAM)

- Sterling OMS Inventory Related MustGather:
- <http://www.ibm.com/support/docview.wss?uid=swg21673613>
- Symptoms / Scenarios: All

OMS -Sourcing / Scheduling Problems (Application Server)

- Sterling OMS Sourcing and Scheduling MustGather:

<http://www.ibm.com/support/docview.wss?uid=swg21673605>

- Symptoms / Scenarios:
- Orders not getting scheduled
- Not getting Order # / Errors with Orders
- Shipments not getting created

Call Center for Commerce (Web Based)

- Web Based Call Center Error

Mustgather:<http://www.ibm.com/support/docview.wss?uid=swg21675357>

- Symptoms / Scenarios:
- Errors with Web Based Client
- Functional Problems with CCC

Health Status Report:

We will get health status report of every server that has been configured in sitescope for every hour.



Patching Process:

Patching is done through the hotfix tool which patches the files across all the respective servers in the cluster and sends an automated mail to the Prod Support PDL

Source Server- c9t27229.itcs.hplicorp.net

Location - /opt/apps/scripts

Scripts used - hotfix_multifile.sh , hotfix_singlefile.sh

Input file for running scripts- web_patches.txt, app_patches.txt

Ripple Start:

Ripple start is triggered after stage propagation is completed during DLP jobs, configuration changes, DB changes and deployments

Automated Dyna Cache clear in production stage:

The below caches will be cleared in prod stage automatically for every 15 mins.

Clear baseCache,perfCache and Dm_Cache in : PRODUCTION STAGING

<https://g1t7200.austin.hplicorp.net:9063/cachemonitor>

<https://g1t7200.austin.hplicorp.net:9088/cachemonitor>

<https://g2t5183.austin.hplicorp.net:9063/cachemonitor>

<https://g2t5183.austin.hplicorp.net:9088/cachemonitor>

Dyna Cache clear in production Live :

On Request with only Approval if any featured products are not available in Prod Live.

<https://g1t7204.austin.hplicorp.net:9063/cachemonitor/>

<https://g1t7204.austin.hplicorp.net:9088/cachemonitor/>

<https://g1t7204.austin.hplicorp.net:9114/cachemonitor/>

<https://g1t7205.austin.hplicorp.net:9063/cachemonitor/>

<https://g1t7205.austin.hplicorp.net:9088/cachemonitor/>

<https://g1t7205.austin.hplicorp.net:9114/cachemonitor/>

<https://g2t5187.austin.hplicorp.net:9063/cachemonitor/>

<https://g2t5187.austin.hplicorp.net:9088/cachemonitor/>

<https://g2t5187.austin.hplicorp.net:9114/cachemonitor/>

<https://g2t5188.austin.hplicorp.net:9063/cachemonitor/>

<https://g2t5188.austin.hplicorp.net:9088/cachemonitor/>

<https://g2t5188.austin.hplicorp.net:9114/cachemonitor/>

CTO Live:

<https://g1t7194.austin.hpibcorp.net:9443/cachemonitor/>

<https://g2t5177.austin.hpibcorp.net:9443/cachemonitor/>

Alternative approach scripts were implemented:-

Source Server- g1t4723c.austin.hpibcorp.net (Jobserver)

Location - /opt/apps/scripts/DynaCacheClearance/

Scripts used - CacheClearance_Live.sh

Running these scripts will clear dynamic cache for WCS Live servers.
mail will be sent to pdl-et-ops-support@hp.com

SOLR Indexing / SOLR core check:

During business everyhour, delta solr index is scheduled run for every one hour.

Also adhoc delta solr index would be run upon business request.



SOLR CORE
VALIDATION EVERY 1



SOLR CORE
VALIDATION EVERY 1

On every successful completion of the solr index, we would get notification email. we would also get the solr core count during solr index run.

Live : <http://g1t7195.austin.hpibcorp.net:9083/solr/admin/cores>

<http://g2t5181.austin.hpibcorp.net:9083/solr/admin/cores>

Stage : <http://g1t7198.austin.hpibcorp.net:9084/solr/admin/cores>

<http://g2t5178.austin.hpibcorp.net:9084/solr/admin/cores>

SOLR index trouble shooting:

- Monitor the index file size
 - Fix is to do the full index

MustGather: Search Runtime related issues for WebSphere Commerce V8.0

<http://www.ibm.com/support/docview.wss?uid=swg21669528>

•NOTE: Always check configfiles to make sure they are current and correct

- Symptoms/Scenarios and Monitor; issues with:
- di-preprocess
 - Anytime when preprocess exits with non-zero exit code. In other words, you should collect MustGather whenever you do not see di-preprocess complete with Program exiting with exit code: 0. Data import pre-processing completed successfully with no errors from WC_installdir\logs\wc-dataimport-preprocess.log
- di-buildindex
 - Anytime when preprocess exits with non-zero exit code. In other words, you should collect MustGather whenever you do not see di-buildindex complete with Data import process completed successfully with no errors from WC_installdir\logs\wc-dataimport-buildindex.log

setupSearchIndex: Check working_dir/search/log/wc-search-index-setup.log with errors (i.e. with exit code other than 0).

- Indexprop
 - Check WC_installdir\logs\wc-indexprop.log with errors (i.e. with exit code other than 0). Index holding different data across staging environment and production environment.
- UpdateSearchIndex
 - Status of UpdateSearchIndexScheduler job indicates failure, checked either through WCS Admin Console or SCHSTATUS database table Items involved in emergency update does not have corresponding data in index updated

Akamai Cache:

During DLP load, after the prod live restart we would clear the Akamai cache to reflect the new changes.

The clear would be triggered from the luna control center.

The below CP codes would be cleared.

274723 - HP store ion

275961 - Store.hp.com Mobile

288763 - cto.store.hp.com

We would receive notification from Akamai on the successful cache clear.



Your Akamai
content removal req

- After AMS 8.0 Akamai cache has been automated in DLP Jobs,

Where a dependency file is needed to start the process post stage propagation,

In /opt/apps/PDHDataLoad/signals location of g1t4723c.austin.hp corp.net we have to touch a file ServerRestart*.done

Where Akamai flush will be carried out and a mail will be sent to PDL-TCS-INTERNAL-PRODSUPPORT & ETR DLP DEV Team.

We would receive notification from Akamai on the successful cache clear.



SUCCESS HP-ROW
NA-G1 (g1t4723c au:

WCS Stage and LIVE URL Details

	WCS Console	WAS	https://g1t7204.austin.hp corp.net:9043/ibm/console
	WCS Console	Admin	https://g1t7202g.austin.hp corp.net:8002/adminconsole
WCS-Live	OrgAdmin Console		https://g1t7202g.austin.hp.com:8004/orgadminconsole
	Management Center		https://glbecom-int.houston.hp.com:8000/lobtools/
	HP US Store URL		http://glbecom-ext.austin.hp.com/us/en

	WCS Console	WAS	https://g1t7200.austin.hp corp.net:9044/ibm/console/secure/securelogon.do
	WCS Console	Admin	https://g1t7197g.austin.hp corp.net:8002/adminconsole
WCS-Stage	OrgAdmin Console		https://glbecom-edit-web.austin.hp.com:8000/lobtools/
	Management Center		https://g1t7197g.austin.hp corp.net:8004/orgadminconsole
	HP US Store URL		http://glbecom-edit-web.austin.hp.com

Backup Strategy:

DB : DB backup is taken during MTP. The schema level backup is triggered for the components –WCS,CTO, OMS and WESB.

Also there would be weekly, daily and incremental backup is been scheduled from DBA side on all the db schemas.

Index backup: Index backup is taken before the solar index and stage propagation run in Prod Stag and Live respectively.

EAR backup: Before deployments of the components, the EAR is backed up for WCS, CTO, WESB and OMS.

Application / DB Restoration:

DB: DB would be restored from the schema level backup

Components: Components will be restored from the backedup EAR.

Frequently used Order Status in WCS and OMS

WCS Order Status and Description	
Order Status	Description
H	Failed Order.
P	Pending: The customer can modify this order/ Still in cart.
M	The customer has initiated payment. Authorization is pending.
Y	The order is a private requisition list.
X	The order has been canceled.
J	Junk or Deleted Order.
F	The order is ready for fulfillment

OMS Order Status and Description	
Order Status	Description
1100	Created
1500	Scheduled
3300	Sent To Node
3700	Shipped
3700.100	Shipment Line Invoiced
9000	Cancelled

1000	Draft Order Created
3950	Receipt Closed
1100.20.ex	Return Lost/Stolen
3950.01	Transfer Order Invoiced
1300	Backordered
3200	Released

Server Details of Production:



Server
details_new_latest.)

Architecture diagram:



Prod-NearProd_dev
_WCS8.vsd

PMR Approach Details:

Figure 1 Quick Reference Guide1PMR

HP.com's Quick Reference Guide for PMRs and AVP Contacts

Open PMR (Problem Management Request)	
<p>Use IBM customer number 2811919 to register and open PMRs.</p> <p>Register (one time) to access IBM Service Request at https://www-946.ibm.com/sr/help/register.html</p> <p>Open PMR at IBM Service Request at http://www.ibm.com/support/servicerequest/</p> <p>E-mail PMR updates to websphere_support@ecurep.ibm.com</p> <ul style="list-style-type: none"> E-mail subject: PMR xxxxx,bbb,ccc Copy your AVL and AVS. <p>Upload PMR data by following directions at http://www.ibm.com/support/docview.wss?uid=swg21153852</p> <ul style="list-style-type: none"> To notify IBM Support that you have uploaded your PMR data, send an e-mail too as a follow up. Also call if during non-business hours. <p>Follow Up. Resolving a PMR will usually involve a lot of back-and-forth discussions between you and IBM Support. It is rarely a simple matter of you just reporting a problem and waiting for the answer. Also, include internal tracking information (e.g., ALM #) in PMR.</p> <p>Call IBM Support at 1-800-IBM-SERV (1-800-426-7378) in USA.</p>	
PMR Severity Levels	
<p>Severity 1 - Severe Business Impact</p> <ul style="list-style-type: none"> You have an outage with a critical impact. No bypass is available. Sev 1s are worked around the clock <u>with you</u> until resolved or impact is reduced by providing a workaround. If you are unavailable, then IBM Support will delay their efforts and probably request that the severity level be lowered. <p>Severity 2 - Major Business Impact</p> <ul style="list-style-type: none"> Sev 2s will be fixed as quickly as possible during normal business hours. <p>Severity 3 - Minor Business Impact</p> <ul style="list-style-type: none"> Sev 3s are fixed based on the needs of the business. Usually fixed in the next fully-tested formal release, but interim fixes may also be available. <p>Severity 4 - Minimal or No Business Impact</p> <ul style="list-style-type: none"> Sev 4s are fixed based on the needs of the business. Usually fixed in the next fully-tested formal release, but interim fixes may also be available. 	
Increase Focus / Escalate PMR during Business Hours	
<p>Business Hours</p> <p>Weekdays: Sunday, 8 PM to Friday, 8 PM Eastern Time, in USA</p>	<p>PMR queues are monitored by IBM Support around the clock during business hours.</p> <p>Around-the-clock monitoring is handed off between IBM Support teams based in different geographies around the world.</p> <p>To increase focus on resolving your PMR or to escalate, Call IBM Support. Explain the situation and what you are wanting done. Be sure you have already updated the PMR status and uploaded requested data too.</p> <ol style="list-style-type: none"> 1) Ask to speak to the Level 2 Support Analyst working the PMR. 2) If necessary, ask for the Duty Manager.
Support during Non-Business Hours	
<p>Non-Business Hours</p> <p>Weekends: Friday, 8 PM to Sunday, 8 PM Eastern Time, in USA</p> <p>Holidays in USA</p>	<p>PMR queues are NOT monitored during <u>non-business</u> hours. Even Sev 1 PMRs are NOT monitored during <u>non-business</u> hours.</p> <p>If you have a Sev 1 PMR and need it to be worked during <u>non-business</u> hours, you must Call IBM Support. Explain the situation and what you are wanting done. Be sure you have already updated the PMR status and uploaded requested data too.</p> <ol style="list-style-type: none"> 1) Ask that the Level 2 Duty Programmer be paged to bring in resources to work the PMR. 2) If necessary, ask for the Duty Manager. 3) If necessary, call the AVL or AVS. <p>You must Call to bring in IBM Support during <u>non-business</u> hours. E-mails and data Uploads by themselves will NOT do this.</p> <p>You must have a Sev 1 PMR for IBM Support to bring in resources to work it during <u>non-business</u> hours.</p>

Figure 2 Quick Reference Guide1PMR

IBM Contacts & Support Links

Accelerated Value Leader (AVL)	Accelerated Value Specialist (AVS)	Supported Products
<p>Lee Perlov lee_perlov@us.ibm.com Cell: 919-696-3908 (preferred) Office: 720-397-5335</p> <p>Cross-project leader and backup: Steven Alexander salexand@us.ibm.com Office: 972-561-8105 (Options available to transfer to remote office)</p>	<p>Roy Leung royleung@ca.ibm.com Office: 905-413-4259</p> <p>Backup: Johnny Clement jdclement@us.ibm.com Office: 720-663-2463</p>	WebSphere Commerce
	<p>Paresh Vinaykya paresh.vinaykya@us.ibm.com Office: 425-753-5178</p> <p>Backup: Marcus Trevino mtrevino@us.ibm.com Office: 940-445-9259</p>	Sterling Order Management Call Center
	<p>Dennis Riddlemoser riddlemo@us.ibm.com Office: 720-342-5689</p>	Sterling Configure Price Quote
		WebSphere Application Server Including: - IBM HTTP Server - Java SDK
		WebSphere Enterprise Service Bus
Support links		
<p>IBM Software Support Handbook: http://ibm.com/support/handbook</p> <p>IBM Knowledge Center: http://ibm.com/knowledgecenter</p> <p>IBM Support Portal: http://ibm.com/support</p>		<p>MustGather: Read first for WebSphere Commerce 7.0 http://www.ibm.com/support/docview.wss?uid=swg21440712</p> <p>MustGather: Read first for Sterling Selling and Fulfillment Suite http://www.ibm.com/support/docview.wss?uid=swg21673807</p> <p>SR Help: http://www-946.ibm.com/support/servicerequest/help/srHelp.action</p>

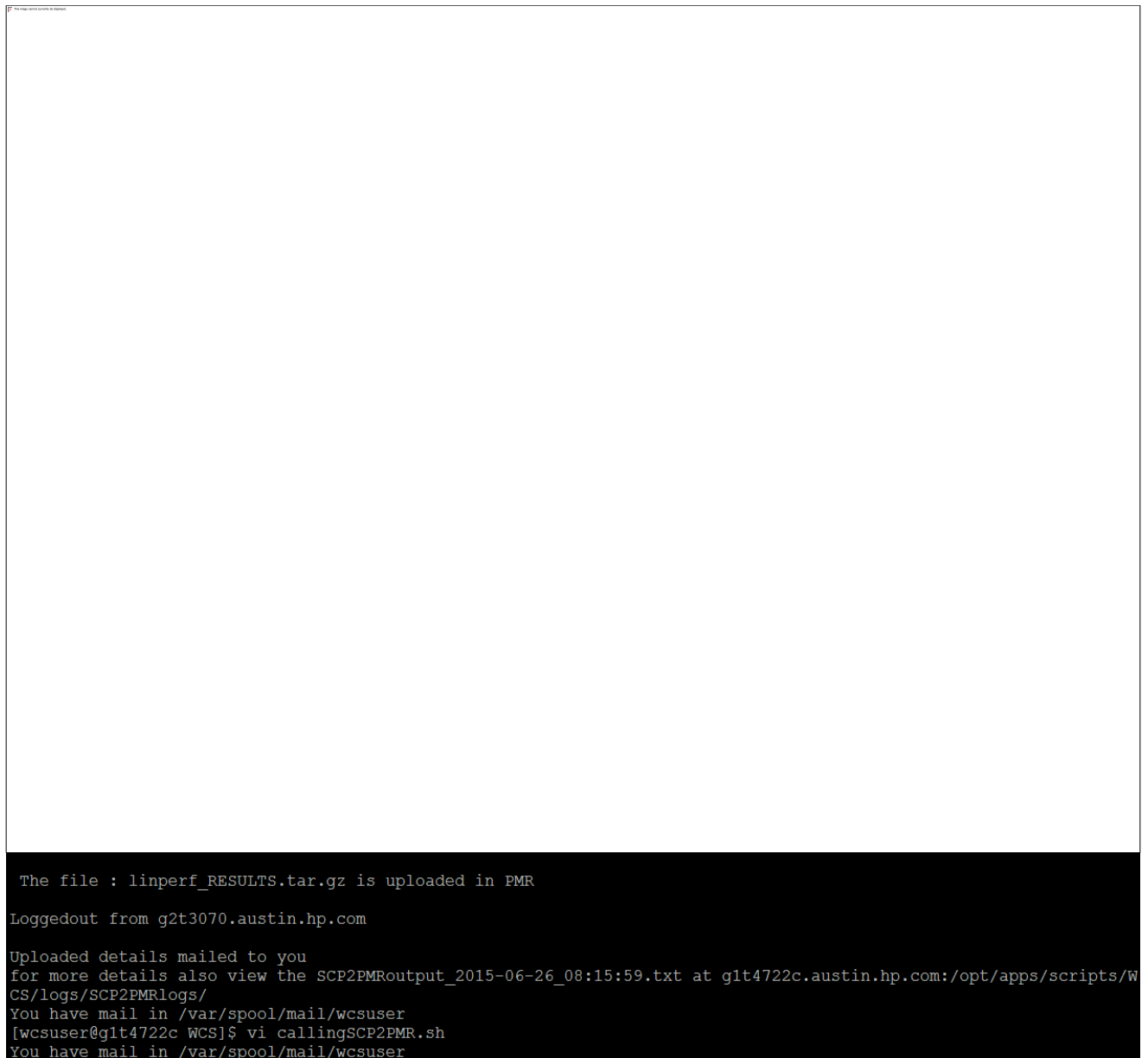
Automated job to upload logs to PMR (IBM FTP location):

Server: Arcsight (glt47207c.austin.hp.com)

Location: /opt/apps/scripts/WCS

Script: SCP2PMR.sh

FLOW: (Sample screenshot from version 7)



```
The file : linperf_RESULTS.tar.gz is uploaded in PMR
Loggedout from glt3070.austin.hp.com
Uploaded details mailed to you
for more details also view the SCP2PMRoutput_2015-06-26_08:15:59.txt at glt4722c.austin.hp.com:/opt/apps/scripts/W
CS/logs/SCP2PMRlogs/
You have mail in /var/spool/mail/wcsuser
[wcsuser@glt4722c WCS]$ vi callingSCP2PMR.sh
You have mail in /var/spool/mail/wcsuser
```

Mail:

From: SCP2PMR_Automated@hp.com [mailto:SCP2PMR_Automated@hp.com]

Sent: Friday, June 26, 2015 1:54 PM

To: C, Moulidharan

Subject: The Respective logs /opt/apps/mustgather_g2t3070_20150623 linperf_RESULTS.tar.gz from the server g2t3070.austin.hp.com is uploaded to PMR successfully

Risk of Delta Propagation:

1. Accidental propagation of additional content from the delta run. While we perform validation across common browse pages, there is a potential for content leak in the below cases:
 - a. If there is a content scheduled for time basis during the middle of the day (mostly eSpot), the change will be propagated to live which may cause dead links.
 - b. If there are any other content changes from any team, then those changes will also be propagated to Live.
 - c. If there are any new products that are scheduled for next business day (i.e. Christmas), the content will be propagated to Live.
2. Server overload during business hours.
 - a. For changes to be reflected in Live the Prod Live Dyna and DM cache have to be cleared. This increases the load on CPU by 50-70% higher.
 - b. Akamai cache has to be cleared – If it is pointed (like home page), then no impact. But, if full Akamai has to be cleared, then it will cause server load to increase by 50% (approximately)
3. Potential for propagation issues with Index and Data:
 - a. Index corruption or additional data triage. (see risks/rollback steps below)

Delta Propagation MTP process summary:

- Complete necessary changes in Stager including SOLR index run, dynacache flush, DM cache flush and QA validation. Finalize if Akamai pinpoint or full flush is required.
- Take a backup of Live SOLR index (10 min)
- Query the staglog table from stager and find the tables that will be changed during the stage to live propagation. Take a table level back up of those tables within prod live database (20-25 min)
- Run Delta propagation (Data and then Index) from Stager to Live (approx. 20 mins – time dependent upon data volume at 0.5 Million records / minute + 20 min of data preprocess time)
- Clear the Cache
 - Clear DM and Dynacache
 - Clear Akamai cache as needed (pinpoint or full)

- Validation by QA/Production Support and business teams
- RISKS: Roll back steps if required:
 - Restore backup of Live index (approx. 20 mins)
 - If a full index run is required due to corruption, then it will take approx. 2 hours and site will be unstable with periodic link issues.

For data changes, restore the tables from the delta backup taken (Approx. 20-25 min) – During this time, site will be unstable as most changes affect catalog tables which is delivering the pages across browse site

Partial Stop of WCS servers

Storefront is UP and There is no Performance or Blocking Issues- Live Sanity too Successful.

Application is working Fine

As part of DLP, when we are tried to do restart (Stop & Start) the Live App Servers, It shows below exception and couldn't able to stop.

ADMU0111E: Program exiting with error:

com.ibm.websphere.management.exception.AdminException: ADMU3060E:

ADMU3028I: Conflict detected on port 9065. Likely causes: a) An instance of the server server1 is already running b) some other process issuing port 9065

- On checking in Console, it shows the status as (Partial stop) and faced the same AdminException (below said) when we tried to restart the servers.
- Also, Cache monitor is not working for one port (9063/9088)
- RTAM Scheduler is not running.

But the Servers are running fine in background check (ps -ef | grep java)

As discussed with Srikanth and RM Team, came to know that they faced similar issue in Lower Environment and to resolve that, they did a Clean Restart.

[Related PMR - 30129,004,000](#)

Related IM - IM19652547

Understanding server process:

```
[wcsuser@g2t5187 ~]$ ps -ef | grep server1  
wcsuser  1001      1 66 10:36 ?          01:15:55 /opt/apps/IBM/Web
```

```
[wcsuser@g2t5187 ~]$ ps -ef | grep nodeagent  
wcsuser  29125     1  1 Aug19 ?          06:13:10 /opt/apps/IBM/We
```

Parent ID of the jvm should be node agents's Process ID.

1001 is PID of Server1 jvm

29125 is Parent ID of Server 1 jvm (ie., Node agent's PID)

But, during the issue, the Parent ID of jvm change to some other number (which means, Demon thread is running) – This is the procedure to identify the issue.

Solution:

Hence, we need to kill the PID of jvm and Start the jvm through console.

1. Open the WAS console to monitor the start/stop.
2. `ps -ef | grep java | grep jvm`
3. Kill -9 JVM's PID → ex: Kill -9 1001
4. See the Stop status in Console.
5. START through WAS console.
6. Monitor the SystemOut.log for log rotation
7. Check the Cache monitor is whether Accessible or not for the affected port.
8. If above said everything is fine, it is good.

Note: Always do manually check the servers are stopped before restarting the server

PGS Failover:

Once PGS failover is happened after confirmation from PGS team we have to restart all jvms of wcs app servers.

PRE-MTP SERVER CHECKS:

Pre-MTP server check gives you a server health status, disk space and SSH connectivity between build server and prod servers.

For Stage: g1t7207c.austin.hplicorp.net -/opt/apps/scripts/

./ServerChecks.sh stage

For Live: g1t7207c.austin.hplicorp.net -/opt/apps/scripts/

./ServerChecks.sh live



Prod_Stage_MTP_ServerChecks_R4.xlsx

AUTOFS configuration for CTO clients

During the downtime for fail over tests related to US HHO ETR holiday readiness, we enabled and tested the custom NFS automation scripts successfully on CTO servers. Few fail over tests were performed and the package was left running at g1 per Tony's preference. This cluster is now capable of performing site to site NFS package fail overs with minimum manual intervention on NFS clients. Attached are automated email notifications that were sent during the activity.

These emails are currently configured to be sent to "ETR Operations Support" and "PDL-TCS-INTERNAL-PRODSUPPORT" PDLs. During every package fail over, two emails will be sent. First email will intimate the distribution of a fail over in progress. No action is necessary on this. The second email is a report of the remount activity on clients. It will have information about nodes that may not have succeeded in mounting all mounts with a list of such nodes and mount points. Please do note that intermittent failure on one or two mounts or hosts is normal. Support team should first check the notification email and if required, log a ticket to UNIX support (follow standard process) for action on failures.

A word about autofs: All clients were configured to use autofs replacing persistent mount. Autofs mounts the file system when an access request is received and unmounts it when no access is performed for a while. On a client that is not using these NFS mounts frequently, 'df' command may not show them mounted. In order to verify, one needs to switch to the folder (cd /nfs mount path), which will cause autofs to mount the file system. Subsequently 'df' command will show it as mounted. This action/check should be included in any troubleshooting documents the application support teams might have.



ATTN_hpit_gbleco ATTN_hpit_gbleco
m-tran_Prod [g1t47:m-tran_Prod [g1t47:



MTP Deployment Procedures for WCS, WESB, CTO/VM and OMS:

During MTP, Please Follow the below steps:

1. Model Copy job disable & HP folder Removal (Patches get deleted after deployment)
2. DB Backup
3. EAR Backup
4. Pre-Deployment activities (if any)
5. Maintenance page Enable (If approval)
6. Deployment (WCS, WESB, OMS, CTO/VM)
7. Maintenance page Disable (If approval)
8. Post- (if any)
9. Hotfix Patches Deployment activities (if any)
10. QA signoff

Please refer the below document for complete MTP procedures.



Latest Whole MTP
Procedures and Steps

MI Approach Details: -

Please find below attached document to raise major incident for huge impact on applications (ETR Side).



Details Required to
Raise MI.docx

Proxy cache clear:

If we face the Oops page on the browser even after clearing the Akamai cache, we need to clear the cache at Proxy server side. This was noticed during load test in UAT-2.

Clear the DNS and object cache of all the proxies below (For UAT-2 Environment):

txe01hpics301.austin.hp.com

The VIP for all the proxies above is web-proxy.austin.hp.com:8080.

Note: The proxy hosts might be different for each environment

A way of checking if we have a bad content on the proxies above, try using proxy-txn.austin.hp.com:8080 and test. If it works it means the proxies above have bad content on cache.

To contact the Proxy team for clearing the Proxy cache, raise the IM ticket to the following AG with the LB and proxy details.

HPSM AG: W-INCLV3-ITIO-GT-IPSW

Pinpoint Tool Triaging:



PinPoint Support
Guide.docx

S2S Failover:



S2S_Failover.vsd



Failover.zip

Script to find and cleanup multiple catgroups for catentries in master catalog:

Please use below select query to find products which have multiple catgroups in master catalog.

```
SELECT catentry_id,
```

```
catgroup_id,
```

```
RANK() OVER (PARTITION BY catentry_id ORDER BY lastupdate DESC nulls last) AS  
row_num
```



```
FROM catgpenrel
WHERE catalog_id = 10001
AND catentry_id IN
  (SELECT catentry_id
   FROM catgpenrel
   WHERE catalog_id = 10001
   GROUP BY catentry_id
   HAVING COUNT(catentry_id) > 1
  )
ORDER BY catentry_id;
```

NOTE: Requesting you to take backup of this data before cleaning up.

Use below delete query to cleanup those in database.

```
DELETE
FROM catgpenrel
WHERE catalog_id = 10001
AND (catentry_id, catgroup_id) IN
  (SELECT catentry_id,
   catgroup_id
  FROM
    (SELECT catentry_id,
     catgroup_id,
     RANK() OVER (PARTITION BY catentry_id ORDER BY lastupdate DESC nulls last) AS
    row_num
   FROM catgpenrel
   WHERE catalog_id = 10001
   AND catentry_id IN
     (SELECT catentry_id
```

```

FROM catgpenrel
WHERE catalog_id = 10001
GROUP BY catentry_id
HAVING COUNT(catentry_id) > 1
)
ORDER BY catentry_id
)
WHERE row_num>1
);
COMMIT;

```

HP Support contact details:

Team	Assignment Group
PGS	W-INCFLS-HPIT-RHYTHM-APPLICATIONS
PGS	W-INCLV3-HPIT-BLUES-APPLICATIONS
NDQ	W-INCFLS-HPIT-RHYTHM-APPLICATIONS
TCS	W-INCLV4-PPSIT-HPCOM-TCS
SAP	W-INCFLS-ESAPS-GSCS-AMOS
DLP / PDH	W-INCLV4-EES-ENFINITY-PRODUCT-HUB
HERMES PDB	W-INCFLS-PPSIT-GEMTECH-MKTENG
Networks	N-INCFLS-HPIT-NW-DATA
MW	W-INCLV4-ESAPS-GSCS-AMSS-NONSAP
UNIX	W-INCFLS-HPIT-RHYTHM-INFRASTRUCTURE
Oracle DBA	W-INCLV3-DC-DB-ORACLE
Unix	W-INCFLS-HPIT-LINUX
VSM security (access issue)	W-INCFLS-HPIT-SECURITY-VSM
Unix security (access issue)	W-INCFLS-HPIT-SECURITY-UNIX
Windows security (access issue)	W-INCFLS-HPIT-SECURITY-WINDOWS
Tidal (job status change request)	W-INCFLS-HPIT-RHYTHM-APPLICATIONS
SAP	W-HPE-INCFLS-ESAPS-GSCS-PLATFORM
Tidal Engineering	W-INCLV4-TIDAL-ENGINEERING
Autofs & NFS mounts	P, Anoop (AH - Deep Support) [mailto:anoop.p@hpe.com]

