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Collecting Data for Troubleshooting

CPD platform related problems:

Data Needs to Capture	
Diagnostic job	Gather diagnostics information from CPD UI

Connectivity related issues:

Data Needs to Capture	
Diagnostic job	Gather diagnostics information from CPD UI (CCS)
Application logs from pod	oc cp <wdp-connect-connection pod>/logs ./<wdp-connect-connection pod>-logs oc cp <wdp-connect-connector pod>/logs ./<wdp-connect-connector pod>-logs

CPD UI related issues:

Data Needs to Capture	
Diagnostic job	Gather diagnostics information from CPD UI
HAR files	Chrome: More Tools > Developer Tools > Network > Export HAR

Data Class related issues:

Data Needs to Capture	
Diagnostic job	Gather diagnostics information from CPD UI (CCS, WKC, AE)
Application logs from swagger	<a href="https://<CPD_URL>/v2/data_profiles/api/explorer/#/Hummingbird%20tasks/getHbTaskLogs">https://<CPD_URL>/v2/data_profiles/api/explorer/#/Hummingbird%20tasks/getHbTaskLogs

Global Search related issues:

Data Needs to Capture	
Diagnostic job	Gather diagnostics information from CPD UI (CCS, WKC)
Pod logs	catalog-api
Application logs from swagger	<a href="https://<CPD_URL>/v2/cams/explorer/#/Assets/retrieveAssets">https://<CPD_URL>/v2/cams/explorer/#/Assets/retrieveAssets

Metadata Enrichment related issues:

Data Needs to Capture	
Diagnostic job	Gather diagnostics information from CPD UI (CCS, WKC, AE)
Application logs from pod	oc cp <wdp-profiling pod>/logs ./<wdp-profiling pod>-logs oc cp <spark-hb-control-plane pod>/logs ./<spark-hb-control-plane pod>-logs
Job log from UI	Job log for MDE job & Screenshot of the job start time
Application logs from swagger	<a href="https://<CPD_URL>/v2/data_profiles/api/explorer/#/Hummingbird%20tasks/getHbTaskLogs">https://<CPD_URL>/v2/data_profiles/api/explorer/#/Hummingbird%20tasks/getHbTaskLogs

Metadata Enrichment related issues:

Data Needs to Capture	
Diagnostic job	Gather diagnostics information from CPD UI (CCS, WKC)

WKC Reporting related issues:

Data Needs to Capture	
Diagnostic job	Gather diagnostics information from CPD UI (CCS, WKC)
Reporting status from API	<pre>curl -i -k -H "content-type: application/json" -H "Authorization: bearer \$Bearer_TOKEN" -X GET "https://\$HOSTNAME/v3/reporting/heartbeat"</pre> <pre>curl -i -k -H "content-type: application/json" -H "Authorization: bearer \$Bearer_TOKEN" -X GET "https://\$HOSTNAME/v3/reporting/999/register"</pre> <pre>curl -i -k -H "content-type: application/json" -H "Authorization: bearer \$Bearer_TOKEN" -X GET "https://\$HOSTNAME/v3/reporting/bistatus?tenant_id=999&table_name=all"</pre>

OpenShift related issues:

Data Needs to Capture	
Diagnostic job	Gather diagnostics information from CPD UI (CCS)
Must-gather from CLI	cc adm must-gather
Collect data for projects from CLI	<pre>oc adm inspect/namespace <CPD namespace></pre> <pre>oc adm inspect/namespace <IBM CPD operator namespace></pre>

OpenShift Data Fusion related issues:

Data Needs to Capture	
Diagnostic job	Gather diagnostics information from CPD UI (CCS)
ODF must-gather from CLI	<pre>oc adm must-gather --image=registry.redhat.io/odf4/ocs-must-gather-rhel8:v4.12 --dest-dir=/tmp/odf-must-gather</pre> <p>or</p> <pre>oc adm must-gather --image=docker-virtual.oneartifactoryci.verizon.com/odf4/ocs-must-gather-rhel8:v4.12</pre>

IBM Storage Fusion related issues:

Data Needs to Capture	
Diagnostic job	Gather diagnostics information from CPD UI (CCS)
Collect logs from Fusion console	Fusion Web Console > “Help icon” > Support logs > Collect logs.

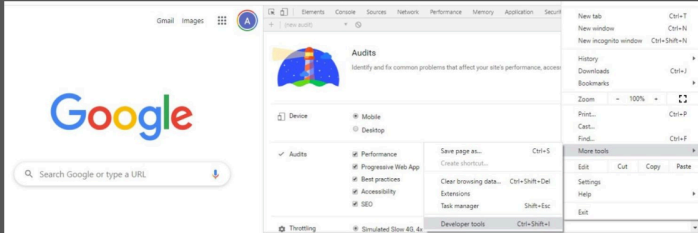
Troubleshooting with Browser Developer Tools

Chrome DevTools

- A set of web developer tools built directly into the Google Chrome
- Help develop, test, and debug websites on-the-fly

Accessing DevTools

- Select the **Chrome menu** at the top-right of your browser, select **Tools > Developer Tools**.
- Right-click on any page element and select **Inspect Element**.
- **Ctrl + Shift + I** to bring up dev tools
- **Ctrl + Shift + J** to open dev tools with console in focus



Mainly any CPD UI related problem can be investigate using the browser developer tool.

Each browser has their own way to use their developer tool. In this example we use Chrome as a browser.

A set of web developer tools built directly into the Google Chrome, that you can use for test, and debug issues on-the-fly.

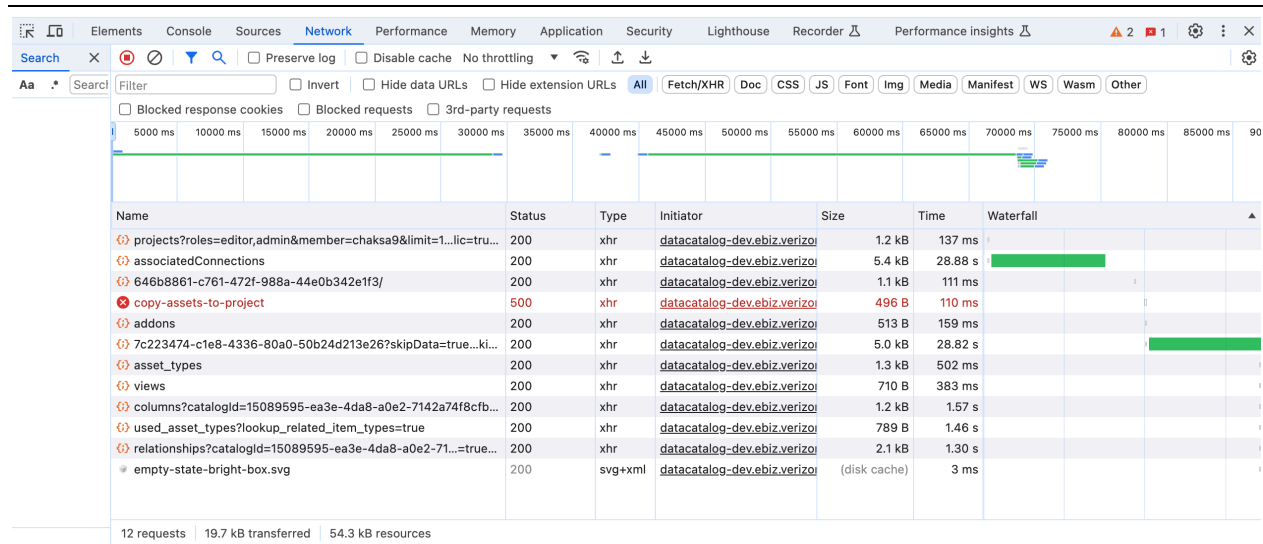
Elements	Resources	Network	Sources	Timeline	Profiles	Audits	Console
<ul style="list-style-type: none">• Inspect and edit on the fly any element in the DOM tree in the Elements panel.• View and change the CSS rules applied to any selected element in the Styles pane.• View and edit a selected element's box model in the Computed pane.• View any changes made to your page locally in the Sources panel.		<ul style="list-style-type: none">• Use the Network panel to record and analyze network activity.• View load information in aggregate or for individual resources.• Filter and sort how resources are displayed• Save, copy, and clear network recordings.• Customize the Network panel to your needs.					<ul style="list-style-type: none">• Open the Console as a dedicated panel or as a drawer next to any other panel.• Stack redundant messages or display them on their own lines.• Clear or persist output between pages, or save it to a file• Filter output by severity level, by hiding network messages, or by regular expression patterns.

There are different dev tools options to investigate different kind of problems.

Mainly the “Network” panels are commonly used for investigating network activities, API call failure and error message returned by a URL.

Use the Network panels from developer tool to find out:

- **API call executed**
- **HTTP status code**
- **Call execution time**
- **Error message**



Name	Headers	Payload	Preview	Response	Initiator	Timing
projects?roles=editor,admin&member=chak...	▼ General					
associatedConnections	Request URL: https://datacatalog-dev.ebiz.verizon.com/data/catalogs/api/15089595-ea3e-4da8-a0e2-7142a74f8cfb/data-asset/copy-assets-to-project					
646b8861-c761-472f-988a-44e0b342e1f3/	Request Method: POST					
copy-assets-to-project	Status Code: 500 Internal Server Error					
addons	Remote Address: 10.144.9.78:80					
7c223474-c1e8-4336-80a0-50b24d213e2...						
asset_types						

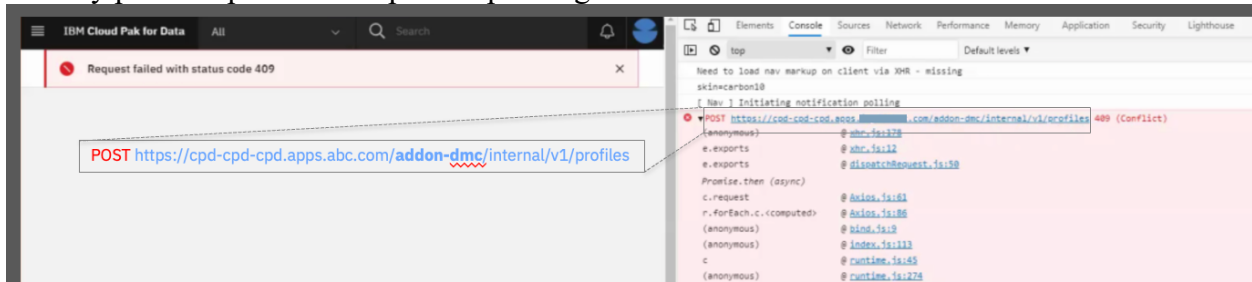
Name	Headers	Payload	Preview	Response	Initiator	Timing
projects?roles=editor,admin&member=chak...	▼ Request Payload view source					
associatedConnections	<pre>{ "assetIds": ["7c223474-c1e8-4336-80a0-50b24d213e26"], "projectId": "646b8861-c761-472f-988a-44e0b342e1f3", "assetIds": ["7c223474-c1e8-4336-80a0-50b24d213e26"], "connectionIds": ["75d4f579-8512-4500-9e43-483dd3cc1753"], "mlServiceId": "", "modelIds": [], "projectId": "646b8861-c761-472f-988a-44e0b342e1f3", "projectStorage": { "type": "assetfiles", "guid": "2e2601f2-6194-4d4d-96b3-d1e77e0db1f4" }, "guid": "2e2601f2-6194-4d4d-96b3-d1e77e0db1f4", "type": "assetfiles" }</pre>					
646b8861-c761-472f-988a-44e0b342e1f3/						
copy-assets-to-project						
addons						
7c223474-c1e8-4336-80a0-50b24d213e2...						
asset_types						
views						
columns?catalogId=15089595-ea3e-4da8-...						
used_asset_types?lookup_related_item_ty...						

Name	Headers	Payload	Preview	Response	Initiator	Timing
projects?roles=editor,admin&member=chak...						
associatedConnections						
646b8861-c761-472f-988a-44e0b342e1f3/						
copy-assets-to-project	unknown error					
addons						
7c223474-c1e8-4336-80a0-50b24d213e2...						

In this case Network panel recorded and analyze network activity. It shows there is one error. The individual API call returns more details about failure. The “Headers”, “Payload” and “Preview” tabs help with the troubleshooting.

Reference: <https://developer.chrome.com/docs/devtools/network/reference>

Identify possible problematic pods depending on API call.



The screenshot shows the IBM Cloud Pak for Data console with a red error message: "Request failed with status code 409". Below it, a callout box highlights a POST request to `https://cpd-cpd-cpd.apps.abc.com/addon-dmc/internal/v1/profiles`. The DevTools console on the right shows the corresponding 409 (Conflict) response.

- Use Console panel for inspect elements returned
- 409 conflict response status code
- POST requests send for create or update resource
- Check URL for find service or component having problem

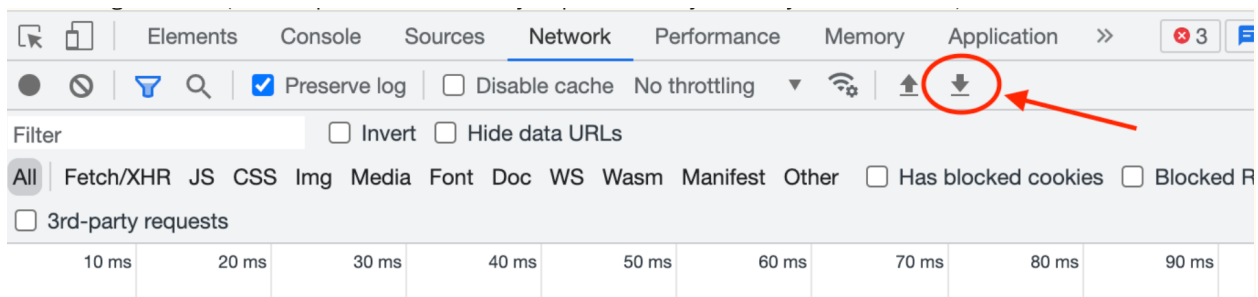
Example

- `https://cpd-cpd-cpd.apps.abc.com/connections/....`
- `https://cpd-cpd-cpd.apps.abc.com/zen-databases/...`
- `https://cpd-cpd-cpd.apps.abc.com/dv/cpd/console/...`
- `https://cpd-cpd-cpd.apps.abc.com/DataFlowDesigner/...`
- `https://cpd-cpd-cpd.apps.abc.com/gov/rules/...`
- `https://cpd-cpd-cpd.apps.abc.com/usermgmt-ui/...`
- `https://cpd-cpd-cpd.apps.abc.com/tis/igcui/connections/autoDiscovery/...`

Find Details using DevTools

- Use Network panel for inspect elements returned
- POST requests send for create or update resource
- Check URL for find service or component having problem. It is not always true you can find out service or component from URL. But in some cases it might help. Check [pod reference table](#) to find pods relation with service.

In this example, the issue is something to do with Data Management Console (DMC).



A HAR (HTTP ARchive) file is a way to preserve the interactions between a web browser and a web page. The captured performance data and other factors can be a great help during troubleshooting. It contains information like HTTP status codes for all transactions that go on behind the scenes to load a web page.

Use HAR Files to troubleshoot web pages that are failing to fully load.

- Track web browser requests
- Include response headers
- The body content
- Page load time.

Depending on the nature of the request, a HAR file can include sensitive details such as passwords, payment information, and private keys. There are open tools available to sanitize HAR file.

If you look at a .har file in a text editor, you will see that it's just a JSON document, containing your request and the associated response. Search through the entire archive for any and all data that may be sensitive.

Accessing MDE column data taking time

24122_DR_MDE_V1_PP2

Columns	Asset	Business terms	Data class	Data quality	Review status
CHANGEDATE	XI_CDRVERSION GFWV_24122_DisasterRecovery_C				
CHANGEDATE	XI_REPVERSION GFWV_24122_DisasterRecovery_C				
CHANGEDATE	XI_RUNVERSION GFWV_24122_DisasterRecovery_C				

View relationships

CHANGEDATE

Column from XI_RUNVERSION

Go to asset in project

Details Governance

Description

Source
GFWV_24122_DisasterRecovery... / SAPS...

Troubleshooting:

1) For any CPD UI issue a starting point is the browser developer tool.

Name	Status	Type	Initiator	Size	Time	Waterfall
?size=24&scaleFactor=1x&showFallbackMonogram=&page...ps%3A%2F%2Fchrome.google...	200	png	chrome://res...	994 B	2 ms	
db925b85-ed34-49e3-a5f4-8cc8fa9e6719?project_id=36...225-4190-b60c-a072fed121ab&co...	500	xhr	datacatalog.v...	712 B	853 ms	
db925b85-ed34-49e3-a5f4-8cc8fa9e6719?project_id=36...225-4190-b60c-a072fed121ab&co...	304	xhr	datacatalog.v...	316 B	402 ms	
db925b85-ed34-49e3-a5f4-8cc8fa9e6719?project_id=36...225-4190-b60c-a072fed121ab&co...	500	xhr	datacatalog.v...	620 B	6.03 s	
3d87ea75f01484b48e97.svg	200	svg+xml	datacatalog.v... (disk cache)		2 ms	
tokenexpiry	200	xhr	datacatalog.v...	613 B	132 ms	

- Mainly the “Network” and “Console” panels are commonly used for investigating network activities, API call failure and error message returned by a URL.
- Focused on the HTTP return/status code and elapsed time to find the problematic API. Compare elapsed time with previous successful run.

Name	Headers	Payload	Preview	Response	Initiator	Timing
?size=24&scaleFactor=1x&showFallbackMonogram=&...	General Request URL: https://datacatalog.verizon.com/gov/metadata-enrichments/api/data-class-assignment/db925b85-ed34-49e3-a5f4-8cc8fa9e6719?project_id=36d882a5-f225-4190-b60c-a072fed121ab&column_name=access_amt Request Method: GET Status Code: 500 Internal Server Error					

- The URL in the “Network > Headers” tab can help to identify the CPD service or component having problem.

Request URL: /gov/metadata-enrichments/api/data-class-assignment/

- Service: gov/WKC/IKC
- Component: metadata-enrichments/data-class-assignment

2) Check [pod reference table](#) [A6] to find pods associated to the Service/Component.

- Are all pods healthy? [A1]
- Any recent warning/fail event associated to the pod? [A2]
- Has pod restarted recently? [A3]
- Any error in the pod log during the problem? [A4]
- What is memory, CPU consumption of pod? [A5]

MDE Publish job appearing hang

1. Check the job log for any error.
2. Monitor the job log for any progress in statistical values.
3. Check [pod reference table](#)^[A6] to find pods associated to publishing
 - a. Are all pods healthy? ^[A1]
 - b. Any recent warning/fail event associated to the pod? ^[A2]
 - c. Has pod restarted recently? ^[A3]
 - d. Any error in the pod log during the problem? ^[A4]
 - e. What is memory, CPU consumption of pod? ^[A5]

Find the SQL that causing problem or failing in the MDE job

For example, an MDE job log reported profiling on the table “TLE_OUTBOUND” taking longer than 300 seconds and it skipped. You like to know the SQL used in this MDE job.

Apr 29, 2024 1:43:09 PM

About this run

Failed

Run details

Duration (seconds): 385

Started by: SVC-dcat-cadm-prd SVC-dcat-cadm-prd

Associated job: 23400_MDE_ediprod_V1

Log Total 23 lines

Download

```
Delta metadata enrichment job run (7e0b102-f5fe-4801-b9e8-d09262f208e) is in state 'Failed'.
Error reason: None of the assets could be processed successfully

Enrichment asset summary:
Total assets: 1
- Assets with status 'Created': 0
- Assets with status 'In progress': 0
- Assets with status 'Not found': 0
- Assets with status 'Completed': 1
- Completed successfully: 0
- Completed with errors due to failed profiling operation: 1
- Completed with errors due to failed term assignment operation: 0

Profiling status:
Completed Hummingbird tasks: 1
Failed Hummingbird tasks: 0
5433a37-a42f-4731-870f-e2c6b9ef82f7 - 2024-04-29T17:43:26.962816992
2024-04-29T17:43:27.047116112 [-06] - SUBMITTED
2024-04-29T17:43:16.7697215132 [-23s] - RUNNING
2024-04-29T17:49:15.337879236Z [-348s] - COMPLETED

Asset failures: 1
2024-04-29T17:49:15.3382 - 50b46894-d4a8-40ba-a180-49ed274f1e3a [PJ ("TLE_OUTBOUND") - Records of the data asset could not be read within 300 seconds. Stopping profile request for the asset to continue with others.
```

1. Find out the Hummingbird task ID from the MDE job log where the asset enrichment attempted. In this case it is “5433a37-a42f-4731-870f-e2c6b9ef82f7”. If there are multiple Hummingbird tasks, you need to consider the asset enriched time and the Hummingbird tasks start time to find the correct one.
2. Go to Hummingbird tasks explorer (Swagger) from web browser and capture the HB task log. You need to authenticate yourself on the Swagger. Secondly, make sure you have access to the respective project where MDE executed.

https://<CPD_HOST>/v2/asset_files/docs/swagger/#/Asset%20Files/getAssetFile

Liberty REST APIs 1.0.0 OAS3

Discover REST APIs available within Liberty

Servers

<https://cpd-zen.apps.vibes.cp.fyre.ibm.com:443>

Authorize

Hummingbird tasks Internal APIs to manage the Hummingbird tasks (restricted).

GET	/v1/hb_tasks	List Hummingbird tasks
POST	/v1/hb_tasks	Create a Hummingbird task
POST	/v1/hb_tasks/stop	Stop Hummingbird tasks
POST	/v1/hb_tasks/delete	Delete Hummingbird tasks
GET	/v1/hb_tasks/{hb_task_id}	Get HB task
DELETE	/v1/hb_tasks/{hb_task_id}	Delete Hummingbird task
POST	/v1/hb_tasks/{hb_task_id}/start	Start Hummingbird task
POST	/v1/hb_tasks/{hb_task_id}/stop	Stop Hummingbird task
GET	/v1/hb_tasks/{hb_task_id}/logs	Get Hummingbird task logs

3. Download the HB task log and search the table to find out the SQL. For example:

```
% grep -i TEL_OUTBOUND hb_task_log.txt
```

```
INFO: CDICO0004I: Interaction properties: {query_timeout=300,
row_limit=10001, schema_name=EDIMON, table_name=TEL_OUTBOUND}.

INFO: CDICO2019I: The specified table name is: TEL_OUTBOUND

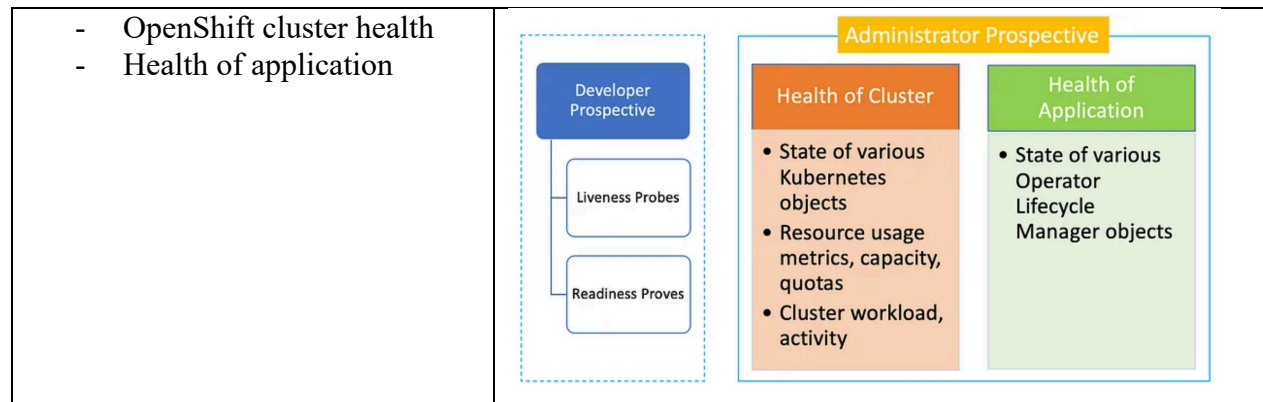
INFO: CDICO2020I: The connector will run the statement: SELECT
"FILE_NAME", "HEADER", "CONTENT" FROM "EDIMON"."TEL_OUTBOUND" FETCH FIRST
10001 ROWS ONLY
```

Check Health of the Cluster

Why should you run the health check?

- Administrator needs to maintain a sense of the CPD cluster's health in order to ensure they're offering application availability and timely technical solution to end users.
- It provides a snapshot of the current status and helps to identify any risk factor. If a CPD component does not work as expected that can cause larger problems down the line.
- Health check provides valuable information that allows the administrator to make decisions about what solution is needed for a potential problem.

What to check?



What are you currently checking?

<ul style="list-style-type: none"> - The health check tool (https://github.com/IBM-ICP4D/cpd-health-check-v4) - Running it as a cron job. 	<table> <tr> <th>Validation</th><th>Details</th></tr> <tr><td>Nodes status</td><td>Validate nodes in ready state</td></tr> <tr><td>Nodes CPU utilization</td><td>Flag nodes where CPU usage higher than 80%</td></tr> <tr><td>Nodes memory utilization</td><td>Flag nodes where memory usage higher than 80%</td></tr> <tr><td>Nodes memory status</td><td>Identify nodes with memory pressure</td></tr> <tr><td>Nodes disk status</td><td>Identify nodes with disk pressure</td></tr> <tr><td>Nodes pid status</td><td>Identify nodes with PID pressure</td></tr> <tr><td>Deployments status</td><td>Validate deployments are healthy</td></tr> <tr><td>Statefulset status</td><td>Validate statefulsts are healthy</td></tr> <tr><td>Replicasets status</td><td>Validate all replicasets available</td></tr> <tr><td>Daemonsets status</td><td>Validate all daemonsets available</td></tr> <tr><td>Routes status</td><td>CPD and Openshift console routes accessible</td></tr> <tr><td>Openshift certificates signing status</td><td>Validate certificate signing requests in approve state</td></tr> <tr><td>Openshift ETCD status</td><td>All ETCD members are available</td></tr> <tr><td>Persistent volume status</td><td>Validate PVs in bound state</td></tr> <tr><td>Persistent volume claims status</td><td>Validate PVCs in bound state</td></tr> <tr><td>Pods status</td><td>Validate PODs in running state</td></tr> <tr><td>High CPU consuming pods</td><td>List top 15 CPU consumed pods</td></tr> <tr><td>High memory consuming pods</td><td>List top 15 memory consumed pods</td></tr> <tr><td>High numner of restarted pods</td><td>List top 15 pods that restarted</td></tr> <tr><td>External TLS Certificate</td><td>Verify TLS Certificate active</td></tr> <tr><td>Internal TLS Certificate</td><td>Verify TLS Certificate active</td></tr> </table>	Validation	Details	Nodes status	Validate nodes in ready state	Nodes CPU utilization	Flag nodes where CPU usage higher than 80%	Nodes memory utilization	Flag nodes where memory usage higher than 80%	Nodes memory status	Identify nodes with memory pressure	Nodes disk status	Identify nodes with disk pressure	Nodes pid status	Identify nodes with PID pressure	Deployments status	Validate deployments are healthy	Statefulset status	Validate statefulsts are healthy	Replicasets status	Validate all replicasets available	Daemonsets status	Validate all daemonsets available	Routes status	CPD and Openshift console routes accessible	Openshift certificates signing status	Validate certificate signing requests in approve state	Openshift ETCD status	All ETCD members are available	Persistent volume status	Validate PVs in bound state	Persistent volume claims status	Validate PVCs in bound state	Pods status	Validate PODs in running state	High CPU consuming pods	List top 15 CPU consumed pods	High memory consuming pods	List top 15 memory consumed pods	High numner of restarted pods	List top 15 pods that restarted	External TLS Certificate	Verify TLS Certificate active	Internal TLS Certificate	Verify TLS Certificate active
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Deployments status	Validate deployments are healthy																																												
Statefulset status	Validate statefulsts are healthy																																												
Replicasets status	Validate all replicasets available																																												
Daemonsets status	Validate all daemonsets available																																												
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Openshift certificates signing status	Validate certificate signing requests in approve state																																												
Openshift ETCD status	All ETCD members are available																																												
Persistent volume status	Validate PVs in bound state																																												
Persistent volume claims status	Validate PVCs in bound state																																												
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New Health check tool to check health of your Red Hat OpenShift cluster and the Cloud Pak for Data platform.

- Introduced with CPD 4.8
- cpd-cli 13.1.5 command-line utility
- cpd-cli health
 - o cluster, nodes, operators, and operands.
 - o storage-validation, storage-performance

When should you use health command?

- Before you install CPD
- After CPD installed
- Before upgrade
- After upgrade

Example:

- cpd-cli health cluster
- cpd-cli health cluster --verbose
- cpd-cli health cluster --verbose --save
- cpd-cli health cluster --verbose --save --log-level=trace

```
# cpd-cli health cluster
#####
CLUSTER RESOURCES
#####
Health Check Report

Cluster Version Check
[SUCCESS...]

Connectivity Test
[SUCCESS...]

Machine Config Pools Healthcheck
[SUCCESS...]

Certificate Signing Request Healthcheck
[SUCCESS...]

Cluster Operator Healthcheck
[SUCCESS...]

ETCD Healthcheck
[SUCCESS...]

Cluster healthcheck info gathered successfully!
```

End-of-day CPD health check

Process of identifying potential issue:

- 1) What are you going to run over night?
 - a. MDI/MDE/Publishing jobs
- 2) What are pods associated to these operations?
 - a. Check [pod reference table](#)^[A6] to find pods associated to the Service/Component.
- 3) Find status of pods using command line or CPD monitor console.
 - a. Are all pods healthy? ^[A1]
 - b. Any pods restarted recently within last 24 hours? If yes, investigate why in restart and take corrective action. ^[A3]

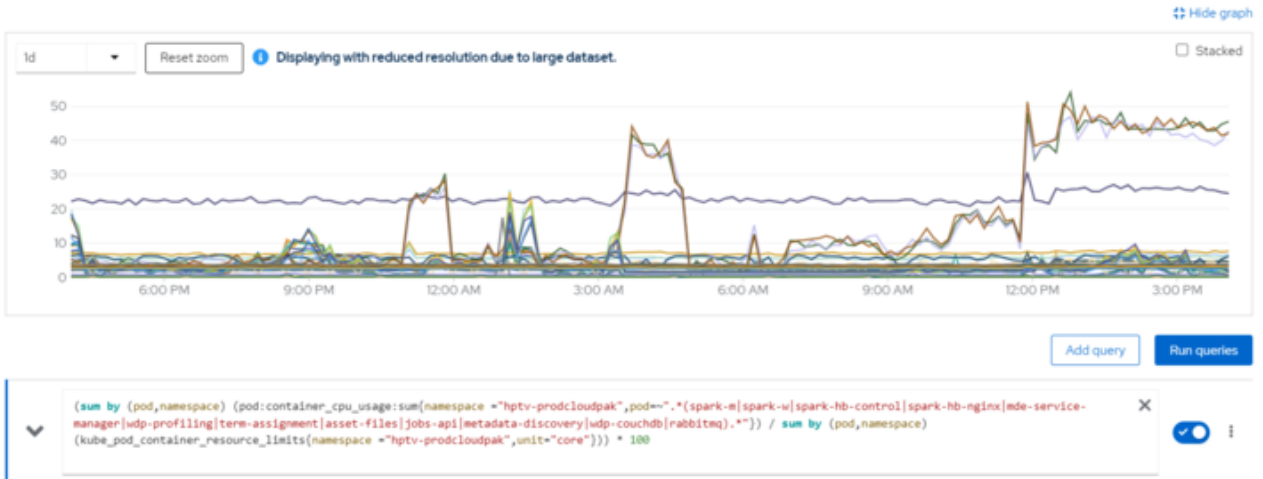
```
# oc get pods | egrep 'spark-m|spark-w|spark-hb-control|spark-hb-nginx|mde-service-manager|wdp-
profiling|term-assignment|asset-files|jobs-api|metadata-discovery|wdp-couchdb|rabbitmq'
```

asset-files-api-7b74f7d4cf-82hzb	1/1	Running	1 (4d4h ago)	4d23h
asset-files-api-7b74f7d4cf-b4xjj	1/1	Running	2 (3d10h ago)	4d23h
asset-files-api-7b74f7d4cf-dgvmz	1/1	Running	0	4d23h
asset-files-api-7b74f7d4cf-hxtpq	1/1	Running	2 (38h ago)	4d23h
asset-files-api-7b74f7d4cf-lr2t8	1/1	Running	1 (4d6h ago)	4d23h
asset-files-api-7b74f7d4cf-z5nqc	1/1	Running	2 (27h ago)	4d23h
jobs-api-6484667d79-5xjv8	1/1	Running	0	5d23h
metadata-discovery-68bfc986dd-gd8zr	1/1	Running	0	5d19h
metadata-discovery-68bfc986dd-rxt7d	1/1	Running	0	5d19h
metadata-discovery-68bfc986dd-w67fn	1/1	Running	0	5d19h
rabbitmq-ha-0	1/1	Running	0	5d3h
rabbitmq-ha-1	1/1	Running	0	5d3h
rabbitmq-ha-2	1/1	Running	0	5d3h
rabbitmq-ha-3	1/1	Running	0	5d3h
spark-hb-control-plane-59759fcd6-89678	2/2	Running	0	8d
spark-hb-nginx-85f7c6995d-6hjbj	1/1	Running	0	5d18h
wdp-couchdb-0	2/2	Running	0	5d21h
wdp-couchdb-1	2/2	Running	0	5d21h
wdp-couchdb-2	2/2	Running	0	5d21h
wdp-profiling-745bd5897b-4vhs4	1/1	Running	0	4d23h
wdp-profiling-745bd5897b-bj262	1/1	Running	0	4d23h

- c. What is memory, CPU consumption of pod over last 24 hours? Measure the pods resource usage from OpenShift console using metrics query. Current resource usage below 40% will be ideal.



CPD/IKC – Knowledge Sharing



Action

A1. Are all pods healthy? If not:

- [Investigate pod issues](#)
- Try restart the pod

A2. Any recent warning/fail event associated to the pod? If yes:

- [Get an understanding of the event](#) and take corrective action.

A3. Has pod restarted recently? If yes:

- Need to investigate if pod restarted multiple times.
- Check pod description to find the reason of restart.
- Capture the previous pod log. Look for any error message at the end of log to figure out the cause of restart.
- Search exiting Jira for similar error message.
- If need help open support ticket with IBM along with all necessary diagnostics data.

A4. Any error in the pod log during the problem? If yes:

- Search exiting Jira for similar error message.
- If need help open support ticket with IBM along with all necessary diagnostics data.

A5. What is memory, CPU consumption of pod?

- Check the pod description for current resource configured.
- Check the pod description for restart due to lack of resource.
- Using OpenShift console monitor pod resource usage for a period.
- Check with IBM support if pod restarted due to lack of resource.

A6. Pod reference table

- https://github.com/sanjitc/Cloud-Pak-for-Data/blob/main/wkc/troubleshooting/Pods_Making_CPD.md