CPD/IKC – Knowledge Sharing

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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	oc cp <wdp-connect-connection pod="">/logs ./<wdp-connect-< td=""></wdp-connect-<></wdp-connect-connection>					
logs from pod	connection pod>-logs					
	oc cp <wdp-connect-connector pod="">/logs ./<wdp-connect-connector< td=""></wdp-connect-connector<></wdp-connect-connector>					
	pod>-logs					

Data Class related issues:

	Data Needs to Capture
Diagnostic job	Gather diagnostics information from CPD UI (CCS, WKC, AE)
Application	https:// <cpd_url>/v2/data_profiles/api/explorer/#/Hummingbird%20t</cpd_url>
logs from	asks/getHbTaskLogs
swagger	

Global Search related issues:

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

Metadata Enrichment related issues:

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

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	ting curl -i -k -H "content-type: application/json" -H "Authorization: bearer							
status from API	\$Bearer_TOKEN" -X GET "https://\$HOSTNAME/v3/reporting/heartbeat"							
	curl -i -k -H "content-type: application/json" -H "Authorization: bearer							
	\$Bearer_TOKEN" -X GET							
	"https://\$HOSTNAME/v3/reporting/999/register"							
	curl -i -k -H "content-type: application/json" -H "Authorization: bearer							
	\$Bearer_TOKEN" -X GET							
	"https://\$HOSTNAME/v3/reporting/bistatus?tenant_id=999&table_nam							
	e=all"							

OpenShift related issues:

	Data Needs to Capture
Must-gather	cc adm must-gather
from CLI	
Collect data	oc adm inspect/namespace <cpd namespace=""></cpd>
for projects	oc adm inspect/namespace <ibm cpd="" namespace="" operator=""></ibm>
from CLI	

OpenShift Data Fusion related issues:

	Data Needs to Capture
ODF must- gather from CLI	oc adm must-gatherimage=registry.redhat.io/odf4/ocs-must-gather-rhel8:v4.12dest-dir=/tmp/odf-must-gather
CLI	or
	oc adm must-gatherimage=docker-virtual.oneartifactoryci.verizon.com/odf4/ocs-must-gather-rhel8:v4.12

IBM Storage Fusion related issues:

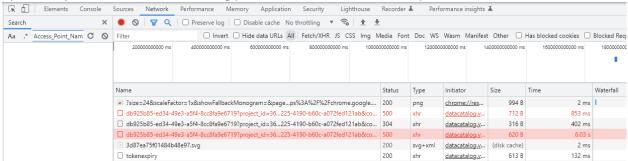
	Data Needs to Capture
Collect logs	Fusion Web Console > "Help icon" > Support logs > Collect logs.
from Fusion	
console	

Accessing MDE column data taking time

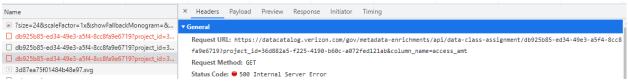


Troubleshooting:

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



- Mainly the "Network" and "Console" panels are commonly used for investigating network activities, API call failure and error message retuned 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.



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
- o Component: metadata-enrichments/data-class-assignment
- 2) Check pod reference table in the 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]
 - O Any error in the pod log during the problem? [44]
 - O What is memory, CPU consumption of pod? [A5]

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 <u>pod reference table</u> 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.

<pre># oc get pods egrep 'spark-m spark-w spark-hb-cor profiling term-assignment asset-files jobs-api meta</pre>				
asset-files-api-7b74f7d4cf-82hzb	1/1	Running	1 (4d4h ago)	4d23h
asset-files-api-7b74f7d4cf-b4xjj	1/1	Running	2 (3d10h ago)	
asset-files-api-7b74f7d4cf-dgbmz	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-59759fcdb6-89678	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.



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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?
 - e. What is memory, CPU consumption of pod? [A5]

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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