

## Cantaloupe Image Server adjustments (starting Rosetta 7.3)

- **Product:** Rosetta
- **Product Version:** 7.3 and up

### Symptoms

After installation of Rosetta Service Pack 7.3 or higher the Rosetta Delivery with some viewers fails.

You might encounter following issues:

- **Openseadragon File Viewer** might show

```
Unable to open [object Object]: HTTP 500 attempting to load TileSource
```

- **Universal Viewer** might show a black screen while the delivered image is not shown. HTTP 404 error might be detected.

### Cause

In Rosetta SP 7.3 **Cantaloupe Image Server** was upgraded to **version 5.0.5**.

- Prior to Rosetta 7.3 - Cantaloupe Image Server is deployed by Rosetta Application as a Tomcat WAR file (webapp) and it uses default Rosetta Application port **1801 (HTTP)** or port **8443 (HTTPS)** for Rosetta with native SSL support enabled.
- Starting Rosetta 7.3 - Cantaloupe Image Server is deployed as JAR file (Java Application) and it uses different port – default HTTP port **8182** (or https port **8183** in case Cantaloupe is configured with native SSL).

### Resolution

**Following installation of Rosetta Service Pack version 7.3 or newer, customers with Rosetta Application working behind Proxy/Load Balancer might need the following configuration:**

- **Rosetta's Administration Module** → **General parameter** → **"cantaloupe\_port"**
  - For load balanced environments - configure with load balanced Delivery port (HTTP port 80, or HTTPS port 443). Typically this would be the value of "load.balancer.del.port" defined in Rosetta's "global.properties" file.
  - In case Rosetta Delivery is not configured behind load balancer/proxy – Configure with local Cantaloupe port (HTTP port 8182 or HTTPS port 8183, as defined in 'cantaloupe.properties' and in 'cantaloupe.properties.tpl').
  - Note: to apply changes to **"cantaloupe\_port"** General Parameter, Rosetta Application restart is required
- **Clear Cantaloupe cache**  
To prevent any issues, it is advisable to clean Cantaloupe cache directory in **\$op\_dir/tmp/delivery/IIIFViewerPreProcessor/**

- Adjust load balancer/proxy configuration – some typical examples

Topology characteristic	SSL configuration	What to check
All in one server with without load balancer	<ul style="list-style-type: none"> <li>• Non secured with SSL</li> <li>• Rosetta application servers configured on default port 1801</li> <li>• Cantaloupe configured on port 8182</li> </ul>	<ul style="list-style-type: none"> <li>• Allow port 8182 on firewall</li> <li>• Clean cantaloupe cache folder</li> </ul>
Single server environment with Rosetta configured with native SSL or multiple servers with Rosetta configured with native SSL without external load balancer/proxy	<ul style="list-style-type: none"> <li>• Rosetta application configured with native SSL on port 8443</li> <li>• Cantaloupe configured in 8183</li> </ul>	<ul style="list-style-type: none"> <li>• Allow port 8183 on firewall</li> <li>• Configure cantaloupe.properties and cantaloupe.properties.tmp files with port 8183 and link java key store file and password</li> <li>• Adjust the Rosetta Global parameters cantaloupe_port to 8183</li> <li>• Clean cantaloupe cache folder</li> </ul>
Environment with multiple Rosetta application servers with external load balancer/proxy configured with SSL offloading.	<ul style="list-style-type: none"> <li>• Rosetta application servers configured on default port 1801</li> <li>• Cantaloupe configured on port 8182</li> <li>• External load balancer with SSL offloading</li> </ul>	<ul style="list-style-type: none"> <li>• Adjust the Rosetta Global parameters cantaloupe_port to 443</li> <li>• Continue balancing Rosetta application on port 1801</li> <li>• Add load balancer/proxy rules for Cantaloupe on port 8182</li> <li>• Setup Load balancer/Proxy to reverse-proxy any "<b>&lt;LB/Proxy Domain&gt;:&lt;LB/Proxy Port&gt;/iiif/</b>" requests to "<b>&lt;load balancer.del.host&gt;:8182/iiif/</b>" for IIIF Delivery to work as expected.</li> </ul> <p>* The 'load balancer.del.host' can be found in Rosetta 'global.propeties' configuration file, by running (SSH to Rosetta application server as 'dps' Unix user):  <b>grep -i load balancer.del.host \$dps_system/conf/global.properties</b></p> <ul style="list-style-type: none"> <li>• Setup Load balancer/Proxy to also reverse-proxy "X-Forwarded-Host" and "X-Forwarded-For"</li> </ul>

Topology characteristic	SSL configuration	What to check
		HTTP headers. <ul style="list-style-type: none"> <li>• Clean cantaloupe cache folder</li> </ul>

- **\$dps\_dev/cantaloupe/cantaloupe.properties file and \$dps\_profile/cantaloupe\_overwrites/cantaloupe.properties.tmpl**
  - Out-of-the-box Cantaloupe runs using port 8182 (HTTP mode), in case you wish to run Cantaloupe with HTTPS mode on port 8183 (or a different port) adjust this file as follows and restart Rosetta Application.

```
# !! Configures the HTTP server. (Standalone mode only.)
http.enabled = false
http.host = 0.0.0.0
http.port = 8182

# !! Configures the HTTPS server. (Standalone mode only.)
https.enabled = true
https.host = 0.0.0.0
https.port = 8183

# !! Available values are `JKS` and `PKCS12`. (Standalone mode only.)
https.key_store_type = JKS
https.key_store_password = password
https.key_store_path = /exlibris/dps/.keystore
https.key_password =
```

## Notes

- Cantaloupe Image Server is restarted with Rosetta application using commands like “dps\_start” or “dps\_restart”.
- To check if Cantaloupe Image Server is running please use following commands:
  - **ps -ef | grep -i cantaloupe** (to see full process parameters)
- Cantaloupe can be also stopped and started independently of Rosetta application using following commands:

### To stop Cantaloupe

```
bash -c "kill -9 `ps -ef | grep cantaloupe | grep -v grep | grep dps | awk '{print $2}'` &> /dev/null"
```

### To start Cantaloupe

```
bash -c "nohup java -Dcantaloupe.config=$dps_dev/cantaloupe/cantaloupe.properties -Xmx2g -jar $dps_dev/cantaloupe/cantaloupe.jar >/dev/null 2>&1 &"
```

- We recommend not to balance or enable access to URL of the Cantaloupe administration UI due to security concerns. (<http://<load balancer.del.host>:8182/admin>)
  - Please consult any doubts about the Cantaloupe Delivery with Rosetta support team.
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