Advanced Configuration Options

The purpose of this document is to elaborate on the advanced configuration options offered by pyClowder2.

This list should be expanded as new features are discovered.

- Logging
- Mounted Paths
- Customizing SSL Certificate Bundle
- Local Processing using Input Path / Output Path

Logging

More information needed on what this does and acceptable/proper configuration values.

Mounted Paths

When running an extractor within a container, it is sometimes necessary or beneficial to map from one an absolute path on the host to a different absolute path within the container.

For example: if Clowder stores its uploaded files at /Users/myname/clowder/data, but you want this data mounted into the extractor container at /ho me/clowder/data to avoid embedding an arbitrary username into the path.

To configure such a scenario, pass a stringified JSON map of host absolute path => container absolute path into the MOUNTED_PATHS environment variable in the container:

```
docker run -it -v /Users/lambert8/clowder/data/:/home/clowder/data/ -e MOUNTED_PATHS '{ "/Users/lambert8/clowder/data":"/home/clowder/data" }' ...
```

The -v flag above tells Docker where to map our files, and the MOUNTED_PATHS environment variable tells pyClowder about this mapping as well.

Now, when the process_message call comes through, the local_paths property of the resource metadata passed by the function stores the substituted path(s).

NOTE: In order to leverage the MOUNTED_PATHS configuration option, your extractor's check_message function must NOT return CheckMessage.

Customizing SSL Certificate Bundle

Python requests allows the user to specify which TLS bundle is used for communicating via HTTP. This can be helpful for performing deep-packet inspection on each request in a particular environment.

By default, requests will install its own certificate bundle. You can tell requests to use a different bundle by setting the REQUESTS_CA_BUNDLE environment variable to the path of the target bundle.

For example, the path to the system certificate bundle for **CentOS** is /etc/pki/ca-trust/extracted/pem/tls-ca-bundle.pem. NOTE: On Ubuntu, this path is instead somewhere in /etc/ssl.

You can mount this file into the container by passing -v /etc/pki/ca-trust/extracted/pem/tls-ca-bundle.pem:/etc/pki/ca-trust/extracted/pem/tls-ca-bundle.pem.

 $\textbf{Finally, tell requests to use this bundle by also passing -e REQUESTS_CA_BUNDLE="/etc/pki/ca-trust/extracted/pem/tls-ca-bundle.pem"}. \\$

Now Python requests will use your custom certificate bundle!

Local Processing using Input Path / Output Path

More information needed on when to use this scenario and acceptable/proper configuration values.