Network Diagnostics

EVE provides tools to capture, persist and export condensed network diagnostics, which can be used for analysis and troubleshooting of connectivity issues between an edge device and the controller or an image datastore.

This topic is split into two parts. First, we explain how EVE is able to hook into the HTTP client to monitor any request made towards the controller or an image datastore, in order to observe and produce a summary, aka **network trace**, of what was happening behind the scenes at different network layers during an HTTP request processing. This can be used to tell what exactly went wrong if a request failed (was it name resolution, TLS handshake or something else?). Even a network trace of a successful request can be useful to better understand and possibly improve how EVE communicates with other endpoints on the network.

In the second part we will explain how EVE captures a snapshot of the current device connectivity state (config, status, metrics) and together with one or more network traces of successful or failed HTTP requests packages all together into so called **netdumps**. These netdumps are persisted and later retrieved for the analysis and troubleshooting of device connectivity issues (even for those no longer reproducible).

Tracing HTTP requests (nettrace)

Dumping network diagnostics (netdump)