

H2020 iP Over ICN- the betTer IP (POINT)

Frequently Asked Questions (FAQs)



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1.Introduction

The purpose of this document is to outline the questions frequently asked about POINT platform and its operational constraints. It is intended to highlight and summarize the limitations observed when running the platform under various use cases and deployment scenarios.

For details on how to install and configure the platform, please see to the HowTo documents in `~/blackadder/doc/HowTos`.

For Hands-on example scenarios of testing POINT setups, please see to the example documents in `~/blackadder/doc/Examples`.

2. Frequently Asked Questions (FAQs):

Q1. Is it possible to have more than nine root scopes as part of Blackadder enumerations ?

Yes it is possible to have more than 9 root scopes, but one must be carefull how to define the rootscope because it can be subject to error in one implementation approach.

If the root scope is identified directly as a character, as e.g. done in the Globalconf element of Blackadder:

```
notificationIID += (char) 253;
```

And the string form is used directly in the ICN API as the identifier, then this works fine.

However, in Blackadder applications there is also the practice of creating IDs through a series of conversions from char array to hex and back. This approach will result in errorsome ID when trying to create a rootscope larger than 9.

Q2. Can HTTP and IP multicast be provided in parallel through a single cNAP?

A single cNAP can provide both HTTP and IP multicast to any connected client, but running both in parallel causes conflicts. It is recommended that IP multicast clients (e.g. STBs for IPTV) be connected to a different cNAP than clients which will be mainly using HTTP.

Q3. Is there any specific order to bring up POINT services?

The POINT platform is composed of an ICN core and ICN applications where the order of execution is important. When using the deployment tool (~/.blackadder/deployment/) the ICN core (click) as well as the topology manager are automatically deployed in the right order, i.e. the core first then ICN applications (e.g., TM or NAP). When deploying manually the following order must be obeyed:

1. Click on all nodes
2. Topology manager
3. Any ICN application other than MOOSE (e.g. NAP, link state monitoring, MONA or bandwidth test tool)
4. When using the monitoring framework MOOSE (MONAs must be deployed in Step 3 first)

Q4. Can the client NAP support asynchronous TCP clients requesting the same HTTP web resource?

When more than one IP endpoint is attached to the same NAP it must be ensured that no experiment is defined where the IP endpoints are accessing the same web resource at the same time. Only a sequential retrieval of the same HTTP resource is supported by the NAP.

Q5. Where can I find the JSON code and libraries required to interface the Rendezvous monitoring data points ?

A small example application for querying this data is included in apps/rv_monitoring of the public release. This application pulls the JSON data, parses it, and reports the results to the monitoring framework. The README-file in that directory also shows how to compile the application with additional debugging information, which includes the complete JSON data set obtained from the RV.