Status

History

• Presented initial CCNx manifest specification at Prague (IETF 93)

• Presented overview of existing designs at interim ICNRG meeting in San Francisco (October)

Outcome

• There’s a lot of disagreement about what a Manifest is and what it should do

Goal

• Define requirements for a “static Manifest”

• Static: some blob of finite-sized data (i.e., not data that is generated in real-time)
data
/some/data
**Manifest** [/some/data]

- /some/data-1 Digest=0x01
- /some/data-2 Digest=0x02
- /some/data-3 Digest=0x03
- /some/data-4 Digest=0x04
Manifest [/some/data]

/some/data-1 Digest=0x01
/some/data-2 Digest=0x02
/some/data-3 Digest=0x03
/some/data-4 Digest=0x04

Links could also contain the KeyId
Proposed Requirements

1. A static Manifest shall be its own type of CCNx Message, in addition to Content Object and Interest.

2. A static Manifest shall represent static data.

3. A static Manifest shall contain pointers to other CCNx Messages (i.e., Manifests or Content Objects).

4. For each pointer in a static Manifest, the type of CCNx Message to which the pointer refers shall be readily identifiable.
Open Questions

1. Should a static Manifest be able to carry sibling or parent pointers?

2. Should loop freedom be a requirement or something that is enforced?

3. Should the static Manifest lifetime be bounded? Should pointers be able to refer to content that no longer exists?

4. If a receiver detects an error in a static Manifest (e.g., a 404 or loop), what should it do?

5. A static Manifest represents a single piece of data. Should we consider a collection of names as a useful, but different use of the same structure?
Proposal: Two Manifests

Why?

• Static Manifests are restrictive—they require the data to exist.

• …Manifests should be able to be generated before the data exists (i.e., a Manifest that points to data that will eventually exist).

Two designs and specifications are in order:

1. Static Manifests (described here, updated spec in progress, to be submitted by IETF 95)

2. “General” Manifests (alluded to here, a topic of future work)