Developing NS-3 based NDN simulator
Alexander Afanasyev, Ilya Moiseenko, Lixia Zhang
University of California, Los Angeles

Conceptual plan
1. CCNx packet format compatibility
2. Transport-layer universality
   - face to talk with application (CcxnLocalFace)
   - face to talk over link (CcxnNetDeviceFace)
   - face to talk over IP layer (CcxnIPFace)
   - face to talk over UDP/TCP (CcxnUdpFace)
3. Modular forwarding strategy
   - flooding
   - best-route
   - ranking
   - ranking with retransmission

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### Interest packet

**Supported fields**
- Name: MustHaveComponents
- Name: MustHaveComponents
- Name: Excl: ChildSelector
- Name: AnswerOriginal
- Scope
- InterestLifetime: Nonce
- Nonce
- InterestLifetime: Not used if negative
- Exclude: Only simple name matching is supported
- Publisher* elements are not supported
- ChildSelector, AnswerOriginKind: 0 - false, 1 - true, -1 not set
- Publisher: Elements are not supported

**Simplifications**
- Nonce: 32 bit random integer. If value is 0, will not be used
- InterestLifetime: Not used if negative
- Exclude: Only simple name matching is supported
- Publisher: Elements are not supported

**Required fields**
- Name
- Content
- Excl: MustHaveComponents
- Publisher* elements are not supported
- ChildSelector, AnswerOriginKind: 0 - false, 1 - true, -1 not set
- Publisher: Elements are not supported

**Unsupported fields**
- Publisher: PublishToAnyDestination
- Publisher: PublisherCertificateDigest

**ContentObject packet**

- Name: /test/test2, Nonce: AQAAAA
- Type: Interest,
- 16:00:00.000000 Tunnel Type: PPP, Packet

**Expected release date: mid 2012**