

Intent Classification

Status update

draft-irtf-nmrg-ibn-intent-classification-02

Chen Li, China Telecom

Xueyuan Sun, China Telecom

Olga Havel, Shucheng Liu (Will), Adriana Olariu, Huawei Technologies

Pedro Martinez-Julia, NICT

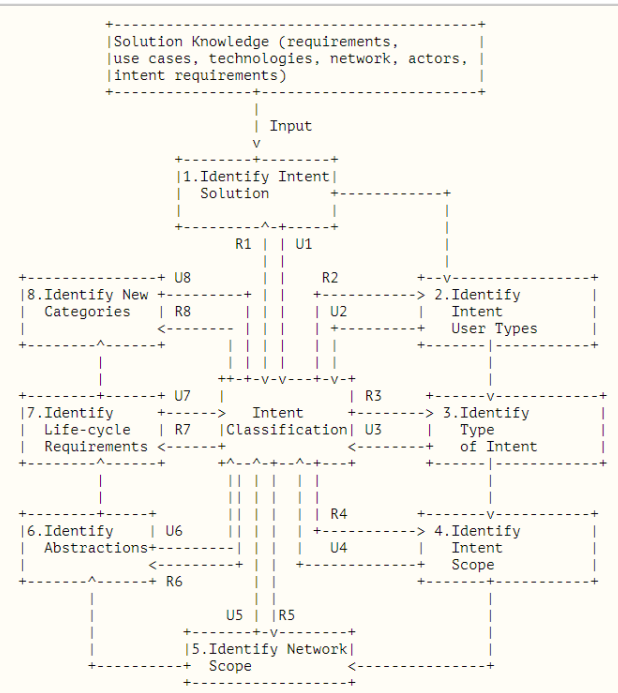
Jeferson Campos Nobre, Federal University of Rio Grande do Sul

Diego R. Lopez, Telefonica I+D

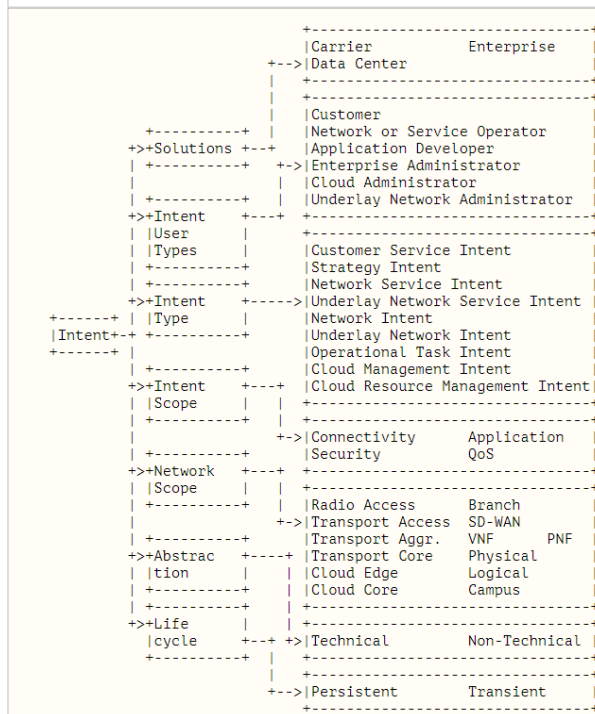
January 2021

Brief introduction

Intent classification methodology



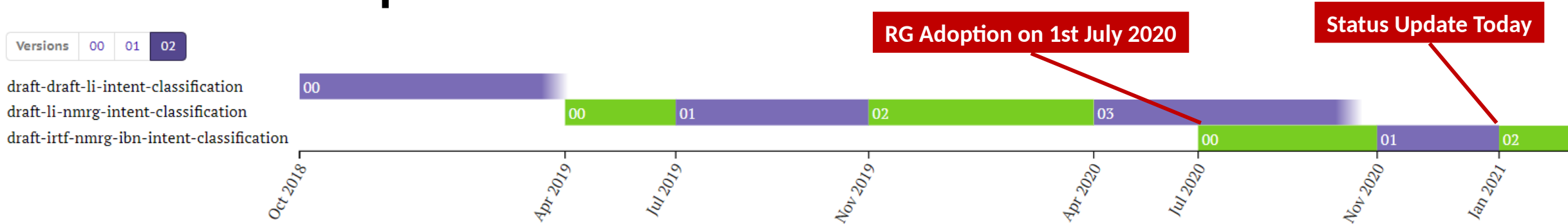
Intent taxonomy



- The draft proposes an intent classification methodology to be used to identify the scope and priorities of individual projects, PoCs, research initiatives, or open-source projects.
- The output of the intent classification is the intent taxonomy, and describes intent solutions, intent user types, intent types, intent scopes, network scopes, abstractions and life-cycle.
- Three classifications have been proposed in this draft following the classification workflow:
 - Carrier solution
 - Data Center solution
 - Enterprise solution
- IETF 108 PoC "A multi-layer approach for IBN"¹ solution has been successfully used as an example for our proposed classification methodology.

[1] Walter Cerroni, Molka Gharbaoui, Barbara Martini, Davide Borsatti, "A multi-level approach to IBN", July 2020,

Status Update



- Draft -02 submitted (<https://datatracker.ietf.org/doc/draft-irtf-nmrg-ibn-intent-classification/>)
- Draft -02 posted on git (<https://github.com/irtf-nmrg/nmrg-ibn-intent-classification/blob/master/draft-irtf-nmrg-ibn-intent-classification-02.txt>)
- We addressed all Comments received (38 comments), main updates:
 1. Sharpen our draft's position in relation to "Intent-Based Networking - Concepts and Overview" ² draft .
 2. Provided detailed description of the intent classification methodology workflow, and how it can be extended (expanded section 7.1).
 3. Integrated Barbara and Walter's PoC¹ into the draft & used it as an example for classification (Added sections 7.3.3 and 7.4.3 with classification examples for Carrier and DC use cases)
 4. Clarification on requirements for different intent types based on context (Section 5.2)
 5. Addressing the benefits of intents to network requirements (Section 5.3)
 6. Add a scope Section (Section 1.1) for identifying the scope and priorities of projects.
 7. Include a Definitions section (Section 4) introducing terms related to IBN with reference to [CLEMM]'s draft ²
 8. Various readability improvements.

[1] Barbara Martini, Walter Cerroni, Molka Gharbaoui, Davide Borsatti, "A multi-level approach to IBN", July 2020, <https://www.ietf.org/proceedings/108/slides/slides-108-nmrg-ietf-108-hackathon-report-a-multi-level-approach-to-ibn-02>

[2] A. Clemm, L. Ciavaglia, L. Granville, J. Tantsura, "Intent-Based Networking - Concepts and Overview", Work in Progress, draft-clemm-nmrg-dist-intent-03, September 2020, <https://tools.ietf.org/html/draft-irtf-nmrg-ibn-concepts-definitions-02>

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Next steps

- We believe the draft is stable now.
- Start the process towards draft publication as informational RFC
 - Solicit last-call reviews
 - Submit to IRSG review (prior to IETF 110)

Thank You