

“Network Incident Terminology”

draft-ietf-nmop-terminology-01

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History

- “It seems we’re all using terms, but we may have different meanings”
- “We should have a terminology draft”
- Adrian and Nigel said, “We’ll try to put something together”
- draft-davis-nmop-incident-terminology-00 January 2024
 - A bit rough
- draft-davis-nmop-incident-terminology-01 May 2024
 - Added co-authors to inject wider opinions
 - Good enough to work on
- draft-ietf-nmop-terminology-00 May 2024
 - Adopted by NMOP
 - Issues raised in adoption poll
- draft-ietf-nmop-terminology-01 June 2024
 - Mop up “easy” adoption poll issues

What Does this Draft Contain?

- Terms and Definitions

- System
- External System
- Controlled External System
- Resource
- Characteristic
- Value
- Condition
- Change
- Detect
- Event
- State
- Relevance
- Occurrence
- Incident
- Problem
- Symptom
- Cause
- Root Cause
- Consolidation
- Alert
- Alarm
- Transient
- Intermittent

- Definitions are:

- Interdependent
 - We have tried to order them
- Somewhat terse
 - We want understandable and robust
 - Not detailed or verbose

- Explanatory work flows:

- These are intended to help, but...
 - ASCII Art creates some limitations
 - The figures capture workflow sequences and dependencies between concepts

Addressing the Bigger Issues

- Side meeting on Tuesday
 - 12 in the room
 - Brad and Watson remote
- Worked through the open issues
 - Agreed some
 - Converged a bit on others
 - Discovered some new ones

Some Open Questions (1 of n)

Discuss now

- What is out intended scope?
 - Just the “network layer”
 - All things Internet
 - Include the “customer service”
- Possible conclusion
 - We are dealing with “network incidents”
 - We provide a component of the final top-to-bottom monitoring system
 - There is a “policy blob” that consumes information from the network
 - Converts to customer information
 - Out of scope for our work

Some Open Questions (2 of n)

Discuss now

- Who is this for?
 - a) Develop terms for consistent use within the IETF
 - b) As a) but with the hope that other bodies would use the terms
 - c) Try to harmonise with terms already used in other bodies
- Possible conclusion
 - Principle target is option a)
 - If b) happens, then it is OK with us
 - We only do c) if we find language that is useful to us
 - Try to re-use term definitions already widespread in RFCs (e.g., “alarm”)
 - Do this by reference if possible

Some Open Questions (3 of n)

Discuss on list

- The term “incident” is critically overloaded
 - We see it used in a lot of other SDOs to refer to customer-related issues
- Possible conclusion
 - Use the word “fault” where we previously had “incident”
 - `Fault: An occurrence that is not desired/required (as it may be indicative of a future undesired State).`
 - Where...
 - `Occurrence: A relevant event. A particular relevant change`
 - But note that RFC 8632 uses “fault” slightly differently
 - Leave definition of “network incident” to draft-ietf-nmop-network-incident-yang

Some Open Questions (4 of n)

Discuss on list

- Defining “Root cause” is at best unhelpful
 - There can be multiple unrelated causes leading to a fault
 - You can never really be sure you have arrived at the root of the tree
 - Causes can be parts of process or even philosophical
- Possible conclusion
 - Strengthen the definition of “cause”
 - Remove “root cause”

Some open issues (5 of n)

- We don't need both “alert” and “alarm”
- RFC 8632 contains a useful definition of “alarm”

Discuss on list

Next Steps

- This is kind of urgent
 - We want this to be a normative reference
- Plan
 - New revision “soon” to attempt to capture some of the agreement so far
 - Expect to iterate a lot
 - Spin up threads on the list for each of the open issues and discussion points
 - Try to do this step by step (not all at once)
 - “Working towards a better terminology”™