Data Discovery

draft-mcbride-data-discovery-problem-statement-00

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What’s the problem?

• Locating data in a standardized way.

• Yes, there are many proprietary ways of finding data.

• Data may be cached, copied and/or stored at multiple locations in the network on route to its final destination.

• Need a standards based solution to discover 1) where the databases exist throughout a network and 2) where specific data objects are located.

• The location of each data store is the first level discovery problem, and the details of the database's directory is the second level discovery problem.
Evolved out of a EC side meeting

Gap 1: to define the mapping between any two popular machine languages

Gap 2: In order to achieve the interconnection of multiple Industrial networks that use various physical layers, an overlay is required.

Gap 3: unified information model for all kinds of verticals

Gap 4: content push in a more secure (SUIT) and efficient (multicast) way

Gap 5: Provide containers and VMs on edge computing gateways to facilitate App mobility. Sync up of states in between Edge Computing Gateways. Definition of common APIs.

**Gap 6:** Edge **data discovery.** Process of finding required data from edge databases and consolidating it into a single source, perhaps name, that can be evaluated

Gap 7: add the deterministic feature into wireless networks (Wifi, RF)

Gap 8: policy indications about the task division for the Edge-Cloud Orchestration
Data Discovery Drafts

1. Data Discovery Problem Statement
2. Edge Data Discovery
3. Mobile Data Discovery
Elevator use case

data needs to be discovered and searched in a standard and granular way.
What’s next?

• Determine if existing protocols will work here.
• If not, target where a new standard protocol is needed.
• Maybe work on it in COIN or a new IETF BOF.
Thank you!