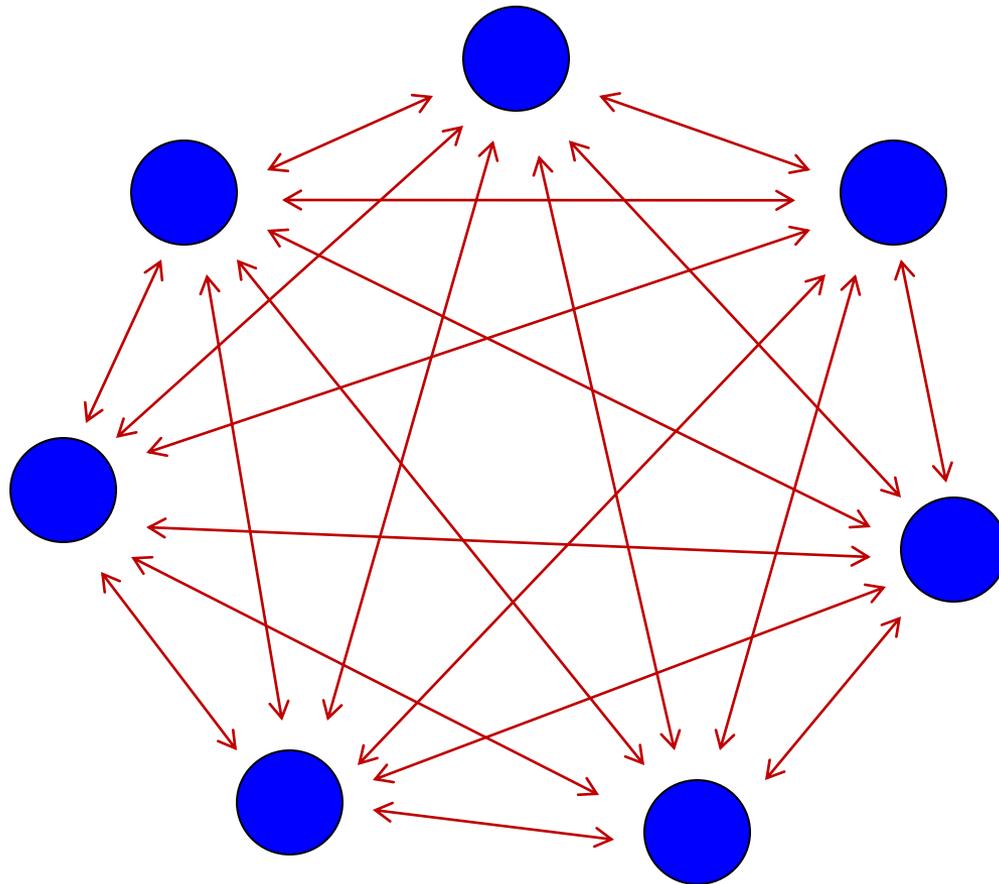
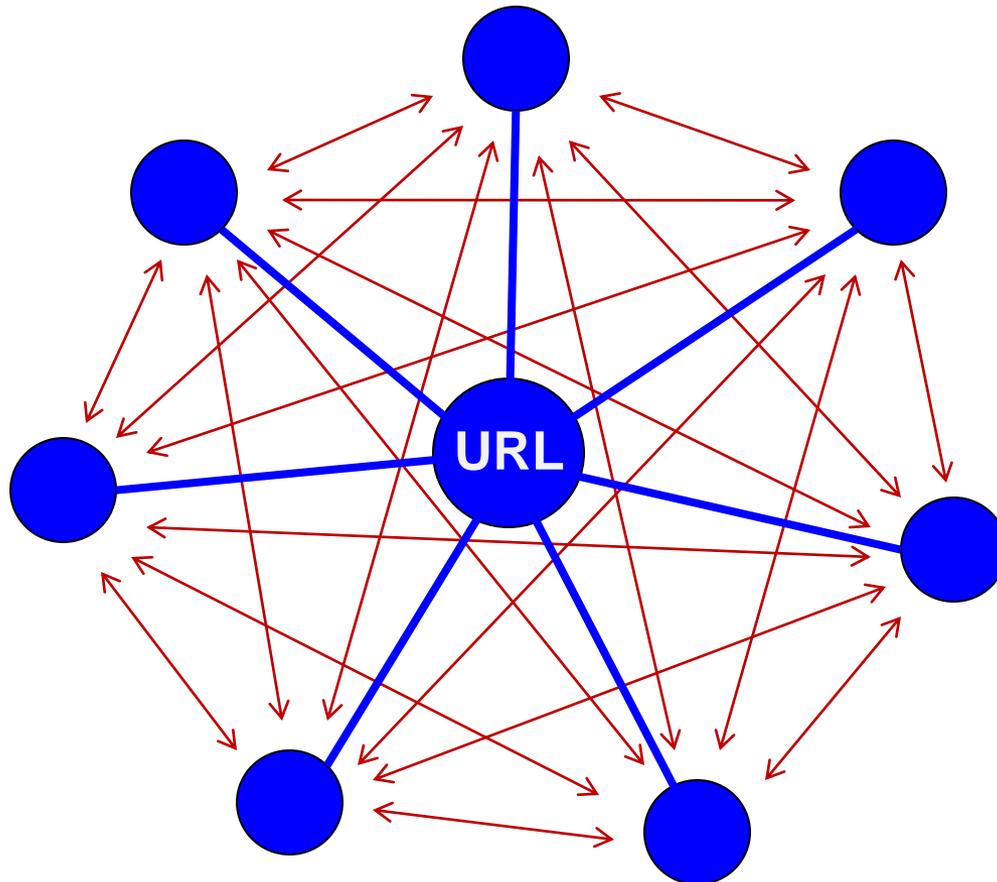


Information exchange  
needs common definitions  
today: from past + context



Information exchange  
needs common definitions  
in future: additionally from URL  
(URL = “Uniform Resource Locator” on the internet)



# Foundation of Information

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→ the new information carrier ("Domain Vector" resp. DV) has the form:

**URL (of online definition) plus number sequence**

- the online definition defines the domain of a selection
- the number sequence describes the selection in the domain

**because**

**Information = selection from a set or domain.**

Preconditions for precise transfer of information are:

- (1) Well defined **domain** (for all participants of conversation)
- (2) Ordered **domain** (so that its elements are selectable by numbers)
- (3) Transfer of the **numbers** which show the **selection** in the domain

In this approach the **domain** is defined online (uniformly at the URL) and called "domain space" (DS). According to (2): The DS is a n-dimensional metric space whose elements are called "Domain vectors" (DVs).

The **URL** identifies the kind of **numbers** resp. **data** (like e.g. a file ending can identify the kind of data in the file)

# Digital information

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The Domain Vector (DV):

**URL (of definition) plus number sequence**

- can represent every definable information - **precisely**
- from a **simple** word to **complex** multidimensional information  
e.g. in science, medicine, industry.
- **http://numericsearch.com** demonstrates searchability.
- DVs are internationally uniform and comparable for similarity search.
- The online definition can be **multilingual**,
- the meaning of DVs is **language independent** (if correctly defined)

**Useful** information is defined by **users**. The **users create** the search criteria.

- **The URL locates the definition and can be abbreviated.**
- **Existing online definitions can be reused  
(linked together and recombined) in new definitions.**
- **For search (and before providing data)  
users can select DSs with the best (most meaningful) definitions.  
This motivates to create better and better definitions.**

# User defined searchable data on the internet

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The DV:

**URL (of def.) plus number sequence**

enables the combination:

- **maximal competence (definition by all internet users)**
- **maximal efficiency (number sequence)** (allows maximal entropy)

## Working group is necessary

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