

# Consideration on Service Descriptor Syntax

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# Essential role of the SERVICE\_ID parameter

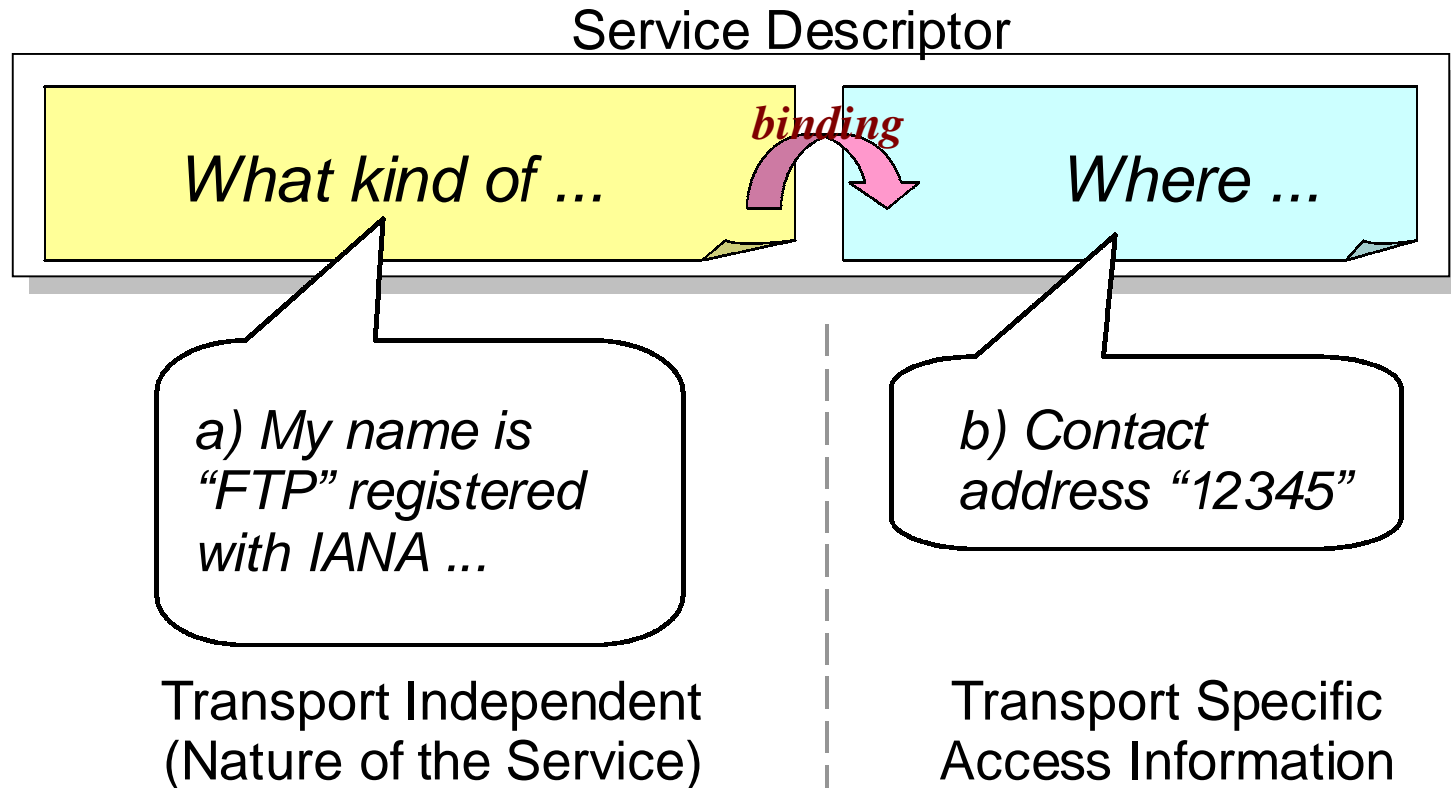
- **The SERVICE\_ID parameter in the SERVICE\_DIRECTORY response**
  - **a) Inform the type (name), attributes and/or other information that describes and qualifies the service.**
    - (This part will be independent of the underlying transport, and will solely describe the nature of the service.)
  - **b) Inform transport specific access information (location or destination identifier) that is required to access a particular service selected by a).**

- a) Transport Independent Part of the Service Description
- **The use of simple service name string registered with a naming authority**
    - Very restrictive information would be advertised by the service.
    - There already exist several descriptor formats that enable to describe the name with its naming authority (e.g., “service:”, “urn:” URI schemes).
  - **Preferable to provide the way to flexibly describe whatever information the service wishes to advertise.**

## b) Transport Specific Access Information

- Employing the *globally* registered service name as a *local* destination identifier will make the application of the transport very restrictive. Or otherwise, the global name space will be exhausted.
- New parameter “DEST\_ID” will solve the problems for this role.
  - ⇒ See “DestId0799.pdf” for more detail.

# Service Descriptor



# Syntax of the Service Descriptor

- **The service descriptor needs to describe a) and b) in pair to a particular service to be accessed.**
- **Avoid re-inventing yet another variant for this purpose, if there already exist well-defined ones.**
- **The transport independent part a) will neither be printing specific nor be PPDT/SBP-2/1394 specific, and the syntax broadly employable will be preferred.**
- **Examine the “Uniform Resource Identifier” syntax for the service descriptor**

# Uniform Resource Identifier

- **Syntax defined in RFC2396**

- `<scheme> : <scheme-specific-part>`

- The scheme (e.g., “http”, “ftp”, ...) is registered with IANA.
    - Extensible by defining a new scheme.
    - Widely used in the Internet.

- **Example**

- `“service:myname.naming-auth://<addr-spec>”`
  - `“myname.naming-auth”` represents transport independent service name along with the naming authority.
  - `“<addr-spec>”` specifies transport specific access information.

# Specification for the service descriptor

- The **SERVICE\_ID** parameter shall conform to the absolute URI syntax specified in RFC2396.
- The **SERVICE\_ID** parameter (URI) shall contain a “**DEST\_ID**” information as an address specification.
- The syntax of the “**DEST\_ID**” shall be a form of “**1\*DIGIT**”  
where **DIGIT** = “0”/“1”/“2”/“3”/“4”/“5”/“6”/“7”/“8”/“9”.