

SWIM-SERV-015 Technical constraint

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Requirement

Title	Technical constraint
Identifier	SWIM-SERV-015
Requirement	If technical constraints are known, a service description shall include information about the technical constraints that would guide the consumer in their client development.
Rationale	Knowing and satisfying the pre-requisite constraints of a service facilitate good use of the service, such as benefiting from the indicated quality of service statements. This requirement supports decision making in terms of assessing the implication, costs and feasibility, of using the service.
Verification	Completeness: Not Applicable. Consistency: If provided, verify that the information corresponds to the described service. Correctness: Not Applicable.
Examples /Notes	Example technical constraints: firewall, minimum bandwidth or server resources, interface language, integration pattern, protocol and communication ports. Example: For a publication service where the subscription mechanism is not based on a capability of the service itself, stakeholders need to understand how they can subscribe (e.g. using electronic form, email, etc).
Level of Implementation	Mandatory Conditional

Guidance

Examples

See the [Technical Constraint section](#) within the [Donlon TOBT Setting Service Description](#).

Guidance for JSON service description



tentative JSON Guidance

[Guidance for JSON service descriptions](#) integrated within the [SWIM Service Description Handbook](#).

Schema

The guidance concerns JSON Schema v0.0.3 (see [Schema releases](#)).

```

"ServiceTechnicalDescription" :
{
  "description" : "Description of the technical aspects of the service including
data structures, interface and operations behaviour, security mechanisms and technical constraints",
  "type": "object",
  "additionalProperties": false,

  "properties":
  {
    "technicalConstraint":
    {
      "description" : "A characteristic of the environment or larger
system within which the service operates. [SWIM-SERV-015]",
      "type" : "array",
      "items" : { "$ref":"#/definitions/TechnicalConstraint" },
      "minItems": 1
    }
  }
},

"TechnicalConstraint" :
{
  "description" : "A characteristic of the environment or larger system within
which the service operates. [SWIM-SERV-015]",
  "type": "object",
  "additionalProperties": false,
  "required": ["name", "description"],
  "properties":
  {
    "description":
    {
      "description" : "The description of the technical constraint.
[SWIM-SERV-015]",
      "type" : "string",
      "minLength":1
    },
    "name":
    {
      "description" : "The name of the technical constraint. [SWIM-
SERV-015]",
      "type" : "string",
      "minLength":1
    }
  }
},

```

Rules expressed for the cases as defined in Registry URD.

case	rules
COMPLIANT	mandatory conditional
CANDIDATE	
DEFINITION	

Guidance

When technical constraints exist, it is **mandatory** to describe them.

Rationale: Knowing and satisfying the pre-requisite constraints of a service facilitate good use of the service, such as benefiting from the indicated quality of service statements. It also supports decision making in terms of assessing the implication, costs and feasibility, of using the service.

Within field `technicalConstraint` (itself within field `serviceTechnicalDescription`) list **zero or more** occurrences of type `TechnicalConstraint`.

TechnicalConstraint - Mandatory Conditional

A characteristic of the environment or larger system within which the service operates.

Note: Mandatory when existing.

Example technical constraints: firewall, minimum bandwidth or server resources, interface language, integration pattern, protocol and communication ports.

attribute name	description	type	guidance	rule
name	The name of the technical constraint.	string	Provide a concise name for the technical constraint.	Mandatory
description	The description of the technical constraint.	string	Describe the technical constraint.	Mandatory

Example



need for a real example

```
"serviceTechnicalDescription": {  
  
  "technicalConstraint": [  
    {  
      "name": "...",  
      "description": "..."  
    }  
  ]  
  
}
```

(A complete JSON example is available in page [JSON example - Donlon TOBT Setting service description.](#))