

**OCF “Ipanema” – What happens if a server encounters unexpected query parameters?  
– Core Technology WG CR 3315**

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## 7.9 Query Parameters

### 7.9.1 Introduction

Properties and Parameters (including those that are part of a Link) may be used in the query part of a URI (see 6.2.2) as one criterion for selection of a particular Resource. This is done by declaring the Property (i.e. <Property Name> = <desired Property Value>) as one of the segments of the query. Only ASCII strings are permitted in query filters, and NULL characters are disallowed in query filters. This means that only Property Values with ASCII characters may be matched in a query filter.

The Resource is selected when all the declared Properties or Link Parameters in the query match the corresponding Properties or Link Parameters in the target.

The processing of any query parameter by a Server is as specified in this document or other OCF specifications. For any query parameters that are not explicitly specified, the Server may ignore those query parameters and the request is processed as if the query parameter did not exist in the request.

### 7.9.2 Use of multiple parameters within a query

When a query contains multiple separate query parameters these are delimited by an "&" as described in 6.2.2.

A Client may apply multiple separate query parameters, for example "?ins=11111&rt=ois.r.switch.binary". If such queries are supported by the Server this shall be accomplished by matching "all of" the different query parameter types ("rt", "ins", "if", etc) against the target of the query. In the example, this resolves to an instance of ois.r.switch.binary that also has an "ins" populated as "11111". There is no significance applied to the order of the query parameters.

A Client may select more than one Resource Type using repeated query parameters, for example "?rt=ois.r.switch.binary&rt=ois.r.ramptime". If such queries are supported by the Server this shall be accomplished by matching "any of" the repeated query parameters against the target of the query. In the example, any instances of "ois.r.switch.binary" and/or "ois.r.ramptime" that may exist are selected.

A Client may combine both multiple repeated parameters and multiple separate parameters in a single query, for example "?if=ois.if.b&ins=11111&rt=ois.r.switch.binary&rt=ois.r.ramptime". If such queries are supported by the Server this shall be accomplished by matching "any of" the repeated query parameters and then matching "all of" the different query parameter types. In the example any instances of "ois.r.switch.binary" and/or "ois.r.ramptime" that also have an "ins" of "11111" that may exist are selected in a batch response.

NOTE The parameters within a query string are represented within the actual messaging protocol as defined in clause 11.5.

### 7.9.3 Application to multi-value "rt" Resources

An "rt" query for a multi-value "rt" Resource with the Default OCF Interface of "ois.if.a", "ois.if.s", "ois.if.r", "ois.if.rw" or "ois.if.baseline" is an extension of a generic "rt" query. When a Server receives a RETRIEVE request for a multi-value "rt" Resource with an "rt" query, (i.e. GET /ResExample?rt=ois.r.foo), the Server should respond only when the query value is an item of the "rt" Property Value of the target Resource and should send back only the Properties associated with the query value(s). For example, upon receiving GET /ResExample?rt=ois.r.switch.binary targeting a Resource with "rt": ["ois.r.switch.binary", "ois.r.light.brightness"], the Server responds with only the Properties of ois.r.switch.binary.