

RETRIEVE Operation - REQUEST (Reference TS-0001, Table 8.1.2-3)

Request Parameter	Short Name	Purpose	Parameter	TS-001 Ver.	RETRIEVE
Operation	<i>op</i>	Operation to be executed	m2m:operation	Rel-1	Mandatory
To	<i>to</i>	Address of target resource on the target CSE	xs:anyURI	Rel-1	Mandatory
From	<i>fr</i>	Identifier of the message originator	m2m:ID	Rel-1	Mandatory
Request Identifier	<i>rqi</i>	Uniquely identifies Request message	m2m:requestID	Rel-1	Mandatory
Content	<i>pc</i>	Content to be transferred	m2m:primitiveContent	Rel-1	Optional
Resource Type	<i>ty</i>	Type of resource to be created	m2m:resourceType	Rel-1	Not Applicable
Originating Timestamp	<i>ot</i>	Timestamp when the message was built	m2m:timestamp	Rel-1	Optional
Request Expiration Timestamp	<i>rqet</i>	Timestamp when the request message expires	m2m:absRelTimestamp	Rel-1	Optional
Result Expiration Timestamp	<i>rset</i>	Timestamp when the result message expires	m2m:absRelTimestamp	Rel-1	Optional
Operation Execution Time	<i>oet</i>	Time by when specified operation is to be executed by target CSE	m2m:absRelTimestamp	Rel-1	Optional
Response Type	<i>rt</i>	Type of response that shall be sent to Originator	m2m:responseTypeInfo	Rel-1	Optional
Result Persistence	<i>rp</i>	Duration during which reference containing responses persist	m2m:absRelTimestamp	Rel-1	Optional
Result Content	<i>rcn</i>	Expected components of the result	m2m:resultContent	Rel-1	Optional
Event Category	<i>ec</i>	Indicates how and when the system should deliver message	m2m:eventCat	Rel-1	Optional
Delivery Aggregation	<i>da</i>	Aggregation of requests to the same target CSE is used	xs:boolean	Rel-1	Optional
Group Request Identifier	<i>gid</i>	Identifier added to group request fanned out to all group members	xs:string	Rel-1	Optional
Group Request Target Members	<i>grtm</i>	Indicates subset of members of a group	list of xs:anyURI	Rel-3	Optional
Filter Criteria	<i>fc</i>	Conditions for filtered retrieve operation	m2m:filterCriteria	Rel-1	Optional
Desired Identifier Result Type	<i>drt</i>	Format of information returned for Discover operation	m2m:desIdResType	Rel-1	Optional
Token Request Indicator	<i>tqi</i>	Originator to attempt Token Req. Procedure if initiated by Receiver	xs:boolean	Rel-2	Optional
Tokens	<i>tkns</i>	Tokens for use in dynamic authorization	list of m2m:dynAuthJWT	Rel-2	Optional
Token IDs	<i>tids</i>	Token ID for use in dynamic authorization	list of m2m:tokenID	Rel-2	Optional
Role IDs	<i>rids</i>	ID for use in role-based access control	list of m2m:roleID	Rel-2	Optional
Local Token IDs	<i>ltids</i>	ID for use in dynamic authorization	list of xs:NCName	Rel-2	Optional
Authorization Signature Indicator	<i>asi</i>	Signature tag for Authorization Relationship Mapping	xs:boolean	Rel-3	Optional
Authorization Signatures	<i>aus</i>	Signature used in Authorization Relationship Mapping	m2m:signatureList	Rel-3	Optional
Authorization Relationship Indicator	<i>auri</i>	Relationship tag for Authorization Relationship Mapping	xs:boolean	Rel-3	Optional
Semantic Query Indicator	<i>sqi</i>	Tag used in semantic queries	xs:boolean	Rel-3	Optional
Release Version Indicator	<i>rvi</i>	Informs target entity which oneM2M version message uses	m2m:releaseVersion	Rel-2	Mandatory (except Rel-1 entity)
Vendor Information	<i>vsi</i>	Vendor-specific information	xs:string	Rel-2	Optional

RETRIEVE Operation - **RESPONSE** (Reference TS-0001, Table 8.1.3-1)

Request Parameter	Short Name	Purpose	Parameter	ACK	TS-001 Ver.	Successful Operation	Unsuccessful Operation
						RETRIEVE	RETRIEVE
Response Status Code	<i>rsc</i>	Response status code (ack, successful, unsuccessful)	m2m:responseStatusCode	Mandatory	Rel-1	Mandatory	Mandatory
Request Identifier	<i>rqi</i>	Uniquely identifies a Request message	m2m:requestID	Mandatory	Rel-1	Mandatory	Mandatory
Content	<i>pc</i>	Content to be transferred	m2m:primitiveContent	Optional (req. resource addr.)	Rel-1	Mandatory (retrieved resource)	Optional (additional error info)
To	<i>to</i>	Identifier of Originator/Transit CSE sending non-blocking request	m2m:ID	Optional	Rel-1	Optional	Optional
From	<i>fr</i>	Identifier of Receiver	m2m:ID	Optional	Rel-1	Optional	Optional
Originating Timestamp	<i>ot</i>	Timestamp when the message was built	m2m:timestamp	Optional	Rel-1	Optional	Optional
Result Expiration Timestamp	<i>rset</i>	Timestamp when the message expires	m2m:absRelTimestamp	Optional	Rel-1	Optional	Optional
Event Category	<i>ec</i>	Event category that shall be used of response message	m2m:eventCat	Optional	Rel-1	Optional	Optional
Content Status	<i>cnst</i>	Present when returned content is partial	m2m:contentStatus	Operation-specific	Rel-2	Optional	Not Applicable
Content Offset	<i>cnot</i>	Point Hosting CSE left off Retrieve processing, leading to partial	xs:positiveInteger	Operation-specific	Rel-2	Optional	Not Applicable
Token Request Information	<i>taf</i>	Used to request tokens from Dynamic Authorization Systems	m2m:dynAuthTokenReqInfo	Operation-specific	Rel-2	Not Applicable	Optional
Assigned Token Identifiers	<i>ati</i>	Mapping of assigned Local-Token-IDs to corresponding Token-Ids	m2m:dynAuthLocalTokenIdAssignments	Operation-specific	Rel-2	Optional	Optional
Auth. Signature Request Info.	<i>asi</i>	Used to request Authorization Signature(s) from holding AE	xs:boolean	Operation-specific	Rel-3	Not Applicable	Optional
Release Version Indicator	<i>rvi</i>	Informs target entity which oneM2M version message uses	m2m:releaseVersion	Mandatory (except Rel-1 entity)	Rel-2	Mandatory (except Rel-1 entity)	Mandatory (except Rel-1 entity)
Vendor Information	<i>vsi</i>	Vendor-specific information	xs:string	Optional	Rel-2	Optional	Optional