

## 1. Non-RESO Technology Standard included in Web API Certification Testing

ID	Standard	Section	Reference	Cert. Level	Test Type	Simple Test Description
1.1	OASIS	OData 4.0 OASIS Standard		Core	Pass/Fail	Satisfy OData 4.0 Standards
1.2	OASIS	OData JSON Format 4.0 OASIS Standard		Core	Pass/Fail	Satisfy OData JSON 4.0 Standards
1.3	OASIS	XML (ATOM Format)		Core	Pass/Fail	Satisfy XML-ATOM Standards
2.0	OASIS	OAuth 2.0		Core	Pass/Fail	Satisfy OAuth 2.0 Web Security Standards
2.1	OASIS	OAuth 2.0		Core	Pass/Fail	Client Password Credentials
2.2	OASIS	OAuth 2.0		Core	Pass/Fail	Token Expirations
2.3	OASIS	OAuth 2.0		Core	Pass/Fail	Format and Construction Tokens
2.4	OASIS	OAuth 2.0		Core	Pass/Fail	Redirect_uri Enforcement
2.5	OASIS	OAuth 2.0		Core	Pass/Fail	Refreshing an Access Token
3.0	IETF	HTTP 1.1	-	Core	TBD	Satisfy HTTP 1.1 Standards

Notes

## 2. Web API Certification Testing: URLs/Endpoints

ID	Standard	Section	Reference	Cert. Level	Test Type	Simple Test Description
4.0	RESO	Web API 1.0.2	(All)	TBD	TBD	Satisfy RESO Web API Standards
4.1	RESO	Web API 1.0.2	2.2.1	Core	Pass/Fail	Version
4.2.1	RESO	Web API 1.0.2	2.3.1	Core	Pass/Fail	URL Structure: Hostname
4.2.2	RESO	Web API 1.0.2	2.3.2	Core	Pass/Fail	URL Structure: URI Stem
4.3	RESO	Web API 1.0.2		Core	Pass/Fail	Service Endpoint
4.4	RESO	Web API 1.0.2	2.3.3	Core	Pass/Fail	DataSystem Endpoint
4.5	RESO	Web API 1.0.2	2.3.5	Core	Pass/Fail	Metadata Endpoint
4.6	RESO	Web API 1.0.2	2.3.4	Core	Pass/Fail	Resource Endpoint(s)
4.7.1	RESO	Web API 1.0.2	2.4.1	Core	Pass/Fail	Required Search Parameters: Search by Unique ID
4.7.2	RESO	Web API 1.0.2		Bronze	Pass/Fail	Required Search Parameters: (Identify specific list of MUST queries)

Notes

### 3. Web API Certification Testing: Query Support (Part 1)

ID	Standard	Section	Reference	Cert. Level	Test Type	Simple Test Description
4.8.1	RESO	Web API 1.0.2	2.4.2	Bronze	Pass/Fail	Required Query Support: \$select
4.8.2	RESO	Web API 1.0.2	2.4.2	Bronze	Pass/Fail	Required Query Support: \$top
4.8.3	RESO	Web API 1.0.2	2.4.2	Bronze	Pass/Fail	Required Query Support: \$skip
4.9.1	RESO	Web API 1.0.2	2.4.4	Silver	Pass/Fail	Optional Query Support: \$filter
4.9.1.1	RESO	Web API 1.0.2	2.4.4	Silver	Pass/Fail	Optional Query Support: \$filter: Comparison: eq
4.9.1.2	RESO	Web API 1.0.2	2.4.4	Silver	Pass/Fail	Optional Query Support: \$filter: Comparison: ne
4.9.1.3	RESO	Web API 1.0.2	2.4.4	Silver	Pass/Fail	Optional Query Support: \$filter: Comparison: gt
4.9.1.4	RESO	Web API 1.0.2	2.4.4	Silver	Pass/Fail	Optional Query Support: \$filter: Comparison: ge
4.9.1.5	RESO	Web API 1.0.2	2.4.4	Silver	Pass/Fail	Optional Query Support: \$filter: Comparison: lt
4.9.1.6	RESO	Web API 1.0.2	2.4.4	Silver	Pass/Fail	Optional Query Support: \$filter: Comparison: le
4.9.1.7	RESO	Web API 1.0.2	2.4.4	Silver	Pass/Fail	Optional Query Support: \$filter: Comparison: has
4.9.2.1	RESO	Web API 1.0.2	2.4.4	Silver	Pass/Fail	Optional Query Support: \$filter: Logical: and
4.9.2.2	RESO	Web API 1.0.2	2.4.4	Silver	Pass/Fail	Optional Query Support: \$filter: Logical: or
4.9.2.3	RESO	Web API 1.0.2	2.4.4	Silver	Pass/Fail	Optional Query Support: \$filter: Logical: not
4.9.2.4	RESO	Web API 1.0.2	2.4.4	Platinum	Pass/Fail	Optional Query Support: \$filter: Grouping ()
4.9.3.1	RESO	Web API 1.0.2	2.4.4	Platinum	Pass/Fail	Optional Query Support: \$filter: String: contains
4.9.3.2	RESO	Web API 1.0.2	2.4.4	Platinum	Pass/Fail	Optional Query Support: \$filter: String: endswith
4.9.3.3	RESO	Web API 1.0.2	2.4.4	Platinum	Pass/Fail	Optional Query Support: \$filter: String: startswith
4.9.3.4	RESO	Web API 1.0.2	2.4.4	Platinum	Pass/Fail	Optional Query Support: \$filter: String: tolower
4.9.3.5	RESO	Web API 1.0.2	2.4.4	Platinum	Pass/Fail	Optional Query Support: \$filter: String: toupper

Notes

#### 4. Web API Certification Testing: Query Support (Part 2)

ID	Standard	Section	Reference	Cert. Level	Test Type	Simple Test Description
4.9.4.1	RESO	Web API 1.0.2	2.4.4	Gold	Pass/Fail	Optional Query Support: \$filter: Date: year
4.9.4.2	RESO	Web API 1.0.2	2.4.4	Gold	Pass/Fail	Optional Query Support: \$filter: Date: month
4.9.4.3	RESO	Web API 1.0.2	2.4.4	Gold	Pass/Fail	Optional Query Support: \$filter: Date: day
4.9.4.4	RESO	Web API 1.0.2	2.4.4	Gold	Pass/Fail	Optional Query Support: \$filter: Date: hour
4.9.4.5	RESO	Web API 1.0.2	2.4.4	Gold	Pass/Fail	Optional Query Support: \$filter: Date: minute
4.9.4.6	RESO	Web API 1.0.2	2.4.4	Gold	Pass/Fail	Optional Query Support: \$filter: Date: second
4.9.4.7	RESO	Web API 1.0.2	2.4.4	Gold	Pass/Fail	Optional Query Support: \$filter: Date: Fractionalseconds
4.9.4.8	RESO	Web API 1.0.2	2.4.4	Gold	Pass/Fail	Optional Query Support: \$filter: Date: Date
4.9.4.9	RESO	Web API 1.0.2	2.4.4	Gold	Pass/Fail	Optional Query Support: \$filter: Date: Time
4.9.4.10	RESO	Web API 1.0.2	2.4.4	Gold	Pass/Fail	Optional Query Support: \$filter: Date: Now
4.9.5	RESO	Web API 1.0.2	2.4.2	Platinum	Pass/Fail	Optional Query Support: \$orderby
4.9.6	RESO	Web API 1.0.2	2.4.2	Platinum	Pass/Fail	Optional Query Support: \$expand

Notes

## 5. Web API Certification Testing

ID	Standard	Section	Reference	Cert. Level	Test Type	Simple Test Description
4.10	RESO	Web API 1.0.2	2.4.3	Core	Pass/Fail	Support Only Correct Data Types
4.11	RESO	Web API 1.0.2	2.4.5	Platinum	Pass/Fail	Lambda Operators
4.12	RESO	Web API 1.0.2	2.4.6	Platinum	Pass/Fail	Literals: \$it
4.12	RESO	Web API 1.0.2	2.4.6	Platinum	Pass/Fail	Literals: \$root
4.13	RESO	Web API 1.0.2	2.4.7	Platinum	Pass/Fail	Geospatial Search Implementation
4.14	RESO	Web API 1.0.2	2.4.8	Bronze	Pass/Fail	Annotations
4.15	RESO	Web API 1.0.2	2.4.9	Bronze	Pass/Fail	Support Single Value Lookups
4.16	RESO	Web API 1.0.2	2.4.10	Bronze	Pass/Fail	Support Multi Value Lookups

Notes

## 6. Web API Certification Testing: Response Codes

ID	Standard	Section	Reference	Cert. Level	Test Type	Simple Test Description
4.17.1	RESO	Web API 1.0.2	2.5.2	Core	Pass/Fail	Response Codes: 200 (OK)
4.17.2	RESO	Web API 1.0.2	2.5.2	Core	Pass/Fail	Response Codes: 202 (Accepted)
4.17.3	RESO	Web API 1.0.2	2.5.2	Core	Pass/Fail	Response Codes: 400 (Bad Request)
4.17.4	RESO	Web API 1.0.2	2.5.2	Core	Pass/Fail	Response Codes: 403 (Forbidden)
4.17.5	RESO	Web API 1.0.2	2.5.2	Core	Pass/Fail	Response Codes: 404 (Not Found)
4.17.6	RESO	Web API 1.0.2	2.5.2	Core	Pass/Fail	Response Codes: 413 (Request Entity Too Large)
4.17.7	RESO	Web API 1.0.2	2.5.2	Core	Pass/Fail	Response Codes: 415 (Unsupported Media)
4.17.8	RESO	Web API 1.0.2	2.5.2	Core	Pass/Fail	Response Codes: 429 (Too Many Requests)
4.17.9	RESO	Web API 1.0.2	2.5.2	Core	Pass/Fail	Response Codes: 500 (Internal Server Error)
4.17.10	RESO	Web API 1.0.2	2.5.2	Core	Pass/Fail	Response Codes: 501 (Not Implemented)

### Notes

## 7. Web API Certification Testing: Data Dictionary Support

ID	Standard	Section	Reference	Cert. Level	Test Type	Simple Test Description
4.18	RESO	Web API 1.0.2	2.6	(See Below)	(See Below)	Standard Resources
4.18.1	RESO	Web API 1.0.2	2.6.2	Silver	Graded	Standard Resource: Office
4.18.2	RESO	Web API 1.0.2	2.6.2	Silver	Graded	Standard Resource: Agent
4.18.3	RESO	Web API 1.0.2	2.6.2	Bronze	Graded	Standard Resource: Property
4.18.4	RESO	Web API 1.0.2	2.6.2	Gold	Graded	Standard Resource: Media
4.18.5	RESO	Web API 1.0.2	2.6.2	Gold	Graded	Standard Resource: OpenHouse
4.18.6	RESO	Web API 1.0.2	2.6.2	Gold	Graded	Standard Resource: Rooms
4.18.7	RESO	Web API 1.0.2	2.6.2	Gold	Graded	Standard Resource: Units

### Discussion Questions:

Does this section mean that you have to be DD Certified to be Web API Certified?

Do you expose the resource? Does the metadata match what we expect? The DD 1.4 EDMX, the DD 1.5 EDMX, etc.

### Notes