**TM Forum Specification**

Risk Management API

Conformance Profile

TMF696B

Team Approved Date: 27-Jan-2021

|  |  |
| --- | --- |
| **Release Status: Pre-production** | **Approval Status: Team Approved** |
| **Version 4.0.0** | **IPR Mode: RAND** |

# NOTICE

Copyright © TM Forum 2021. All Rights Reserved.

This document and translations of it may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published, and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this section are included on all such copies and derivative works. However, this document itself may not be modified in any way, including by removing the copyright notice or references to TM FORUM, except as needed for the purpose of developing any document or deliverable produced by a TM FORUM Collaboration Project Team (in which case the rules applicable to copyrights, as set forth in the [TM FORUM IPR Policy](http://www.tmforum.org/IPRPolicy/11525/home.html), must be followed) or as required to translate it into languages other than English.

The limited permissions granted above are perpetual and will not be revoked by TM FORUM or its successors or assigns.

This document and the information contained herein is provided on an "AS IS" basis and TM FORUM DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY OWNERSHIP RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Direct inquiries to the TM Forum office:

181 New Road, Suite 304

Parsippany, NJ 07054, USA

Tel No. +1 973 944 5100

Fax No. +1 973 944 5110

TM Forum Web Page: [www.tmforum.org](http://www.tmforum.org/)

# TABLE OF CONTENTS

[NOTICE 2](#_Toc63932598)

[TABLE OF CONTENTS 3](#_Toc63932599)

[INTRODUCTION - API DESCRIPTION 4](#_Toc63932600)

[RESOURCE MODEL CONFORMANCE 5](#_Toc63932601)

[API MANDATORY RESOURCES 5](#_Toc63932602)

[General Notes on Resource Attribute Conformance 5](#_Toc63932603)

[PartyRoleRiskAssessment Resource Mandatory Attributes 6](#_Toc63932604)

[PartyRoleProductOfferingRiskAssessment Resource Mandatory Attributes 7](#_Toc63932605)

[API OPERATIONS CONFORMANCE 9](#_Toc63932606)

[PartyRoleRiskAssessment Mandatory Operations 9](#_Toc63932607)

[PartyRoleProductOfferingRiskAssessment Mandatory Operations 9](#_Toc63932608)

[API GET OPERATION CONFORMANCE 10](#_Toc63932609)

[Definitions for Filter 10](#_Toc63932610)

[GET /partyRoleRiskAssessment?fields=...&{filtering} 10](#_Toc63932611)

[GET /partyRoleRiskAssessment/{id}?fields=...&{filtering} 11](#_Toc63932612)

[GET /partyRoleProductOfferingRiskAssessment?fields=...&{filtering} 11](#_Toc63932613)

[GET /partyRoleProductOfferingRiskAssessment/{id}?fields=...&{filtering} 11](#_Toc63932614)

[API POST OPERATION CONFORMANCE 12](#_Toc63932615)

[POST /partyRoleRiskAssessment 12](#_Toc63932616)

[POST /partyRoleProductOfferingRiskAssessment 12](#_Toc63932617)

[ACKNOWLEDGEMENTS 14](#_Toc63932618)

[Release History 14](#_Toc63932619)

[Version History 14](#_Toc63932620)

# INTRODUCTION - API DESCRIPTION

The Risk Management API allows the retrieval of Risk Assessments during interaction with PartyRoles (individuals or organizations) typically engaged in an Order process from ProviderPartyRole."

# RESOURCE MODEL CONFORMANCE

## API MANDATORY RESOURCES

The following table indicates the mandatory resources for this API.

| Resource Name | Comment |
| --- | --- |
| PartyRoleRiskAssessment |  |
| PartyRoleProductOfferingRiskAssessment |  |

## General Notes on Resource Attribute Conformance

There are three situations that could occur for an attribute:

* Mandatory attribute,
* Mandatory attribute if the optional parent attribute is present,
* Non-mandatory/Optional attribute. Those are all the other attributes not mentioned in the following subsections. Please refer to the corresponding API REST Specification for more details.
* The tables in the subsections below indicate which attributes are mandatory including mandatory when an optional parent is present.
* Where a resource is an input into an API (e.g. POST, PATCH), Mandatory means that the attribute value must be supplied by the API consumer in the input (and must not be blank or null).
* Where a resource is an output from an API (e.g. GET, POST), Mandatory means that the attribute value must be supplied by the API provider in the output (and must not be blank or null).
* For a sub-resource that is not an array, Mandatory (cardinality 1..1) means that the sub-resource must be present, while Optional (cardinality 0..1) means that the sub-resource may be absent. Mandatory and Optional on the sub-resource attributes apply to the sub-resource if present.
* For a sub-resource that is an array, Mandatory (cardinality 1..\*) means that at least one sub-resource must be present in the array, while Optional (cardinality 0..\*) means that the array may be absent. Mandatory and Optional on the sub-resource attributes apply to each of the sub-resources if present.

In this table are listed all mandatory attributes. A mandatory attribute MUST be retrieved in resource representation when no attribute selection is used (e.g., GET /../{id}) without any attribute selection.

When an attribute is listed with an indentation (in second column) it means this attribute is mandatory if root (parent) attribute is present.

## PartyRoleRiskAssessment Resource Mandatory Attributes

| Mandatory attribute when parent is present | | Rule |
| --- | --- | --- |
| href | | M (in response messages) |
| id | | M (in response messages) |
| status | | M (in response messages) |
| partyRole | | M  The role attribute is not mandatory because the id could be a partyRole id. In this case @referredType must indicate the partyRole (example User, Customer, etc.).  If the id is a Party id then a role must be provided. |
|  | @referredType | M |
|  | href | M (in response messages) |
|  | id | M |
| riskAssessmentResult | | M (in response messages) |
|  | overallScore | M |
| riskAssessmentResult.score (if present) | | Array of RiskScore |
|  | riskName | M |
|  | score | M |
| place (if present) | | The place is passed by ref. |
|  | @referredType | M |
|  | href | M (in response messages) |
|  | id | M |
|  | role | M |
| characteristic (if present) | | Array of Characteristic |
|  | name | M |
|  | value | M |
|  | valueType | M |
| characteristic.characteristicRelationship (if present) | | Array of CharacteristicRelationship |
|  | href | M (in response messages) |
|  | id | M |
|  | relationshipType | M |

## PartyRoleProductOfferingRiskAssessment Resource Mandatory Attributes

| Mandatory attribute when parent is present | | Rule |
| --- | --- | --- |
| href | | M (in response messages) |
| id | | M (in response messages) |
| status | | M (in response messages) |
| productOffering | | M |
|  | href | M (in response messages) |
|  | id | M |
| partyRole | | M  The role attribute is not mandatory because the id could be a partyRole id. In this case @referredType must indicate the partyRole (example User, Customer, etc.).  If the id is a Party id then a role must be provided. |
|  | @referredType | M |
|  | href | M (in response messages) |
|  | id | M |
| riskAssessmentResult | | M (in response messages) |
|  | overallScore | M |
| riskAssessmentResult.score (if present) | | Array of RiskScore |
|  | riskName | M |
|  | score | M |
| place (if present) | | The place is passed by ref. |
|  | @referredType | M |
|  | href | M (in response messages) |
|  | id | M |
|  | role | M |
| characteristic (if present) | | Array of Characteristic |
|  | name | M |
|  | value | M |
|  | valueType | M |
| characteristic.characteristicRelationship (if present) | | Array of CharacteristicRelationship |
|  | href | M (in response messages) |
|  | id | M |
|  | relationshipType | M |

# API OPERATIONS CONFORMANCE

For every single resource the following tables includes mandatory operations.

## PartyRoleRiskAssessment Mandatory Operations

The following table indicates which ones are mandatory for the PartyRoleRiskAssessment resource:

| Uniform API Operation |
| --- |
| GET |
| POST |

## PartyRoleProductOfferingRiskAssessment Mandatory Operations

The following table indicates which ones are mandatory for the PartyRoleProductOfferingRiskAssessment resource:

| Uniform API Operation |
| --- |
| GET |
| POST |

# API GET OPERATION CONFORMANCE

All the GET operations in this API share the same status code pattern.

GET operation must be provided only if the implementation creates task resources, returning 201 for POST operation. If the implementation returns risk results synchronously and does not create task resources, there is no need to implement GET.

|  |  |
| --- | --- |
| GET | Mandatory/Optional |
| Response Status Code 200 if successful | M |
| Response Status Code 404 if not found | M |

## Definitions for Filter

The following definitions apply to all the GET operations:

* Filtered Search: A filtered search can be applied using query parameters to obtain only the resources that meet the criteria defined by the filtering parameters included in the query request. Several elements can be applied to the filtered search. In that case logic, a logical AND is applied to combine the criteria (e.g.:?severity=<value>&status=<value>).
* Attribute selection (Limiting Response Data): In order to limit which attributes are included in the response, the GET request can include the ?fields= query parameter. Only those attributes whose names are supplied in this parameter will be returned. Attribute selection capabilities are the same for collections retrieval and individual resource queries.
* Level: The filtering and attribute selection can apply to the top level properties (attributes) and subproperties. The tables below show which attributes need to be supported in top-level or contained resources.

## GET /partyRoleRiskAssessment?fields=...&{filtering}

This operation list or find PartyRoleRiskAssessment entities

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels

## GET /partyRoleRiskAssessment/{id}?fields=...&{filtering}

This operation retrieves a PartyRoleRiskAssessment entity. Attribute selection is enabled for all first level attributes.

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels

## GET /partyRoleProductOfferingRiskAssessment?fields=...&{filtering}

This operation list or find PartyRoleProductOfferingRiskAssessment entities

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels

## GET /partyRoleProductOfferingRiskAssessment/{id}?fields=...&{filtering}

This operation retrieves a PartyRoleProductOfferingRiskAssessment entity. Attribute selection is enabled for all first level attributes.

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels

# API POST OPERATION CONFORMANCE

All the POST operations in this API share the same status code pattern.

An implementation can decide whether to provide 200 and/or 201 to be conformant. If 201 is provided, then the GET operation is mandatory.

|  |  |
| --- | --- |
| POST | Mandatory/Optional |
| Status Code 201 if task resource created | M |
| Status Code 200 if risk result returned immediately and no task resource created | M |

## POST /partyRoleRiskAssessment

This operation creates a PartyRoleRiskAssessment entity.

The following table provides the list of mandatory attributes when creating an instance of the PartyRoleRiskAssessment resource, including any possible rule, conditions and applicable default values.

| Mandatory Attributes | Rule |
| --- | --- |
| partyRole |  |
| partyRole.@referredType |  |
| partyRole.id |  |

## POST /partyRoleProductOfferingRiskAssessment

This operation creates a PartyRoleProductOfferingRiskAssessment entity.

The following table provides the list of mandatory attributes when creating an instance of the PartyRoleProductOfferingRiskAssessment resource, including any possible rule, conditions and applicable default values.

| Mandatory Attributes | Rule |
| --- | --- |
| partyRole |  |
| partyRole.@referredType |  |
| partyRole.id |  |
| productOffering |  |
| productOffering.id |  |

# ACKNOWLEDGEMENTS

## Release History

|  |  |  |  |
| --- | --- | --- | --- |
| **Release Status** | **Date** | **Release led by:** | **Description** |
| Pre-production | 27-Jan-2021 | Jonathan Goldberg (Amdocs) | Initial Release |
|  |  |  |  |

## Version History

|  |  |  |  |
| --- | --- | --- | --- |
| **Release Status** | **Date** | **Release led by:** | **Description** |
| 4.0.0 | 27-Oct-2020 | Jonathan Goldberg, Amdocs | Generated Conformance Profile for review |
| 4.0.0 | 27-Jan-2020 | Alan Pope, TM Forum | Final edits prior to publication |