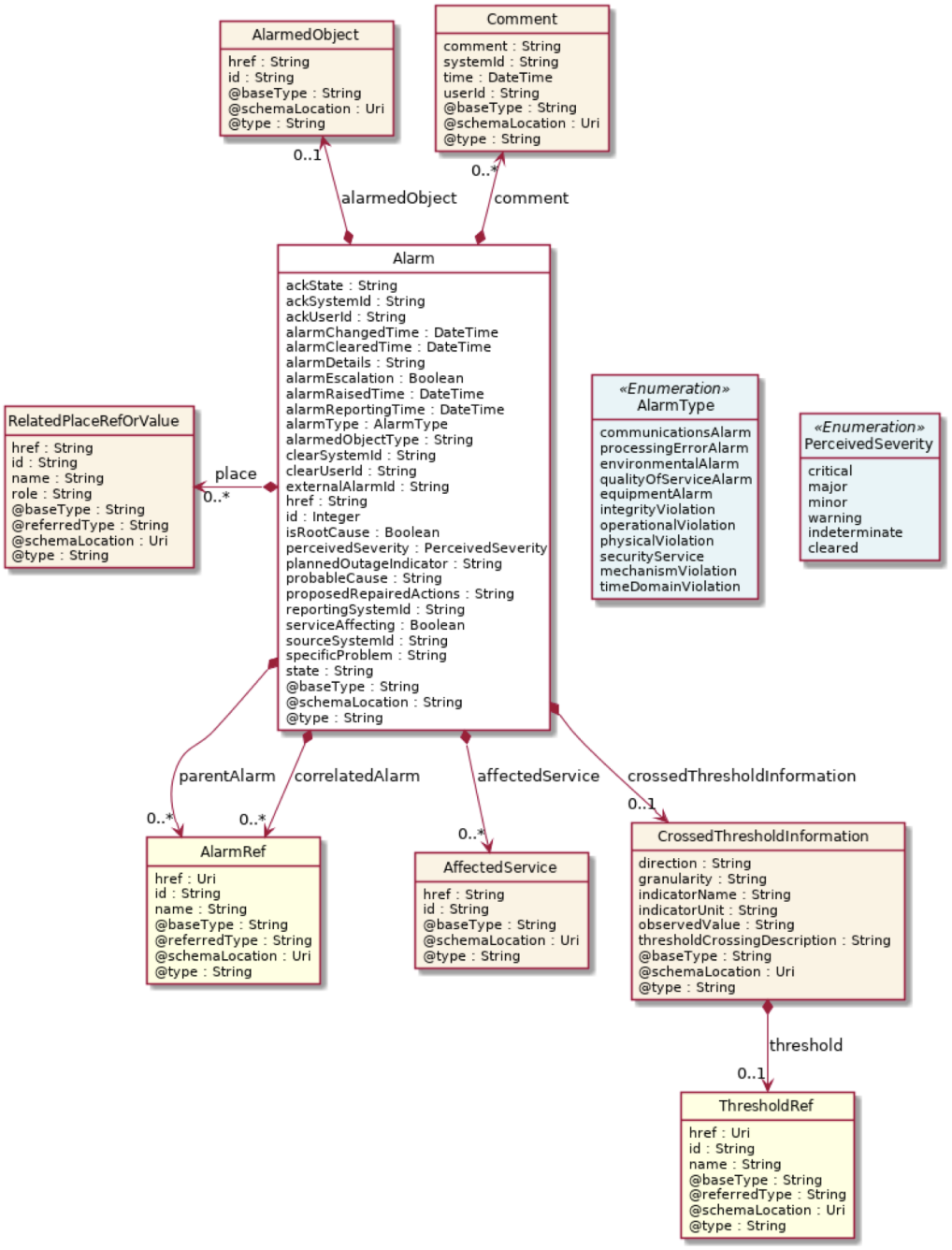
TMF642 - Alarm Management API mapping



Based on the diagram from the Alarm Management API User Guide, here is NEP Alarms attributes map to the TMF API attributes:

Mapping of Your Attributes to TMF API Attributes

NEP Alarm Attributes	TMF API Attributes	Component of TMF API
Severity	perceivedSeverity	Alarm
Alarm Status	state	Alarm
Alarm Name	(Custom or part of alarmDetails)	Alarm
Alarm ID	id	Alarm
Site Name	name	RelatedPlaceRefOrValue
Site ID	id	RelatedPlaceRefOrValue
Zone	(Custom or part of place)	RelatedPlaceRefOrValue
NE Name	alarmedObject	Alarm
Source	sourceSystemId	Alarm
Cell Name	(Custom or part of alarmDetails)	Alarm
NE Type	alarmedObjectType	Alarm
Vendor	(Custom or part of alarmDetails)	Alarm
Technology	(Custom or part of alarmDetails)	Alarm
Location Information	place	Alarm
First Occurence	alarmRaisedTime	Alarm
Last Occurence	alarmClearedTime	Alarm
Event Time	alarmReportingTime	Alarm
Occurence Time	(Custom or part of alarmDetails)	Alarm
CSN	externalAlarmId	Alarm
Clearance Time	alarmClearedTime	Alarm
Clearance User	clearUserId	Alarm
Acknowledgment Time	ackTime	Alarm
Acknowledgment User	ackUserId	Alarm
FM Receive Time	alarmReportingTime	Alarm
Escalated By	(Custom or part of alarmDetails)	Alarm
Escalated To	(Custom or part of alarmDetails)	Alarm
Escalation Time	(Custom or part of alarmDetails)	Alarm
Escalation Type	(Custom or part of alarmDetails)	Alarm
Ticket Id	correlatedAlarm (id attribute)	Alarm
Parent Node	parentAlarm	Alarm

Notes

- **Mandatory attributes** *(green highlighted attributes)* in TMF API must always be provided to conform with the API specifications. These include `perceivedSeverity`, `state`, `id`, and `alarmRaisedTime`.
- **Custom or part of alarmDetails:** These attributes do not have direct matches in the API. You may store these as part of a generic field like `alarmDetails` or add them as custom attributes if the implementation of the API supports extensions.
- **RelatedPlaceRefOrValue**: Attributes like `Site Name`, `Site ID`, and possibly `Zone` can be mapped to the `place` object structure within the API, specifically under the `RelatedPlaceRefOrValue` that is linked to the `Alarm` object.
- Attributes directly under `Alarm` are part of the main alarm data model, while others like `AlarmRef` or `RelatedPlaceRefOrValue` relate to related or referenced objects within the alarm's context.

This mapping ensures that NEP alarm attributes are effectively aligned with the TMF API structure, adhering to industry standards and enabling interoperability.

📌 For more details check the TMF639 documentation :

TMF642 - Alarm Management API User Guide

Json representation sample

Json representation of an example of a '**Alarm**' resource object

```
{
    "id": "8675309",
    "href": "/alarmManagement/v4/alarm/8675309",
    "@baseType": "Alarm",
    "@type": "Alarm",
    "@schemaLocation": "/alarmManagement/v4/schema/Alarm.schem
a.json",
    "externalAlarmId": "5551212",
    "state": "updated",
    "alarmType": "environmentalAlarm",
    "perceivedSeverity": "major",
    "probableCause": "rectifierLowVoltage",
```

```
    "specificProblem": "ps=3,sl=1,in=8",
    "alarmedObjectType": "Rectifier",
    "alarmedObject": {
        "id": "93051825",
        "href": "/resourceInventoryManagement/v4/resource/9305
1825"
    },
    "sourceSystemId": "ems-1",
    "alarmDetails": "voltage=95",
    "alarmRaisedTime": "2019-07-03T03:32:17.235Z",
    "alarmReportingTime": "2019-07-03T03:32:17.552Z",
    "alarmChangedTime": "2019-07-03T03:32:52.744Z",
    "ackSystemId": "ems-1",
    "ackUserId": "bob@example.net",
    "ackTime": "2019-07-03T03:33:12.623Z",
    "ackState": "acknowledged",
    "isRoot": false,
    "parentAlarm": {
        "id": "8675300"
    },
    "correlatedAlarm": [
        {
            "id": "8675399",
            "href": "/alarmManagement/v4/alarm/868675399"
        }
    ],
    "comment": [
        {
        "userId": "bob@example.net",
        "systemId": "ems-1",
        "time": "2019-07-03T03:37:33.827Z",
        "comment": "Dispatched"
        }
    ]
}
```