{-}ackolade

MongoDB Physical Model

Schema for:

Model name: JPMC Photon Insights
Author:
Version:
File name: PhotonInsights_Model.json
File path: /Users/graeme/Library/CloudStorage/GoogleDrive-graeme.robinson@mongodb.com/Shared drives/Dev Rel Pod/Customers/JPMC/_Design Reviews/Photon Insights/PhotonInsights_Model.json
Printed On: Wed Nov 15 2023 17:11:18 GMT-0700 (Mountain Standard Time)
Created with: Hackolade - Polyglot data modeling for NoSQL databases, storage formats, REST APIs, and JSON in RDBMS

1. MODEL

1.1 Model JPMC Photon Insights

1.1.1 JPMC Photon Insights Entity Relationship Diagram

Photon Insights

Users

_id	pk	str
firstName		str
middleName		str
lastName		str
persona		str
active		bool
lastLoginTime		date
LOB		str

Builds

_id		str
builds		arr
[0]		doc
version		str
buildID		num
commitID		str
commitTime		date
branchName		str
buildTime		date

Modules

_id	pk	num
payload		doc
name		str
LOB		str
applicationID		num
photonVersion		str
monetaVersion		str
productName		str
productLine		str
productOwner		str
productOwnerSID		str
techPartner		str
techPartnerSID		str
createdOn		date
subscribedUsers		arr
deployments		arr
[0]		doc
deploymentId		str
payload		doc
applicationName		str
deploymentName		str
env		str
version		str
instanceCount		num
hasAnomaly		bool
platform		str
instances		arr
anomalies		arr
[0]		doc
anomalyId		old
payload		doc
propertyName		str
deploymentName		str
expectedValue		str
currentValue		str
instanceCount		num
description		str
impactedInstances		arr
ruleId		num
remediated		bool
Instances		arr
[0]		doc
applicationId		num
deploymentName		str
deploymentId		str
env		str
instanceId		str
platform		str
tags		arr

Messages

_id	pk	str
baseLine		bool
cloud		doc
space_name		str
appId		num
appName		str
instanceId		str
space_id		str
configs		doc

Modifications

_id	pk	old
deploymentId		str
instanceId		str
operation		str
oldValue		str
newValue		str
path		str
date		date

Rules

_id	pk	num
version		num
ruleType		str
property		str
supportedInVersion		str
active		bool
activeFrom		date
script		str
valueComparisonType		str
value		str
lowerBound		str
upperBound		str
severity		str
description		str
createdOn		date
lastUpdatedOn		date
createdBy		str
lastUpdatedBy		str

Relationships:
- Users_Deployments
- Modules_Builds
- Instances_Messages
- Deployments_Messages
- Instances_ConfigChanges
- Anomalies_Rules

1.1.2 JPMC Photon Insights Properties

1.1.2.1 Details tab

PROPERTY	VALUE
Model name	JPMC Photon Insights
Technical name	
Description	
Author	
Version	
Target	MongoDB
DB version	v7.x
Synchronization Id	
Lineage capture	
Polyglot models	
Comments	

1.1.2.2 Options tab

PROPERTY	VALUE
Color	

1.1.3 JPMC Photon Insights DB Definitions

2. DATABASES

2.1 Database Photon Insights
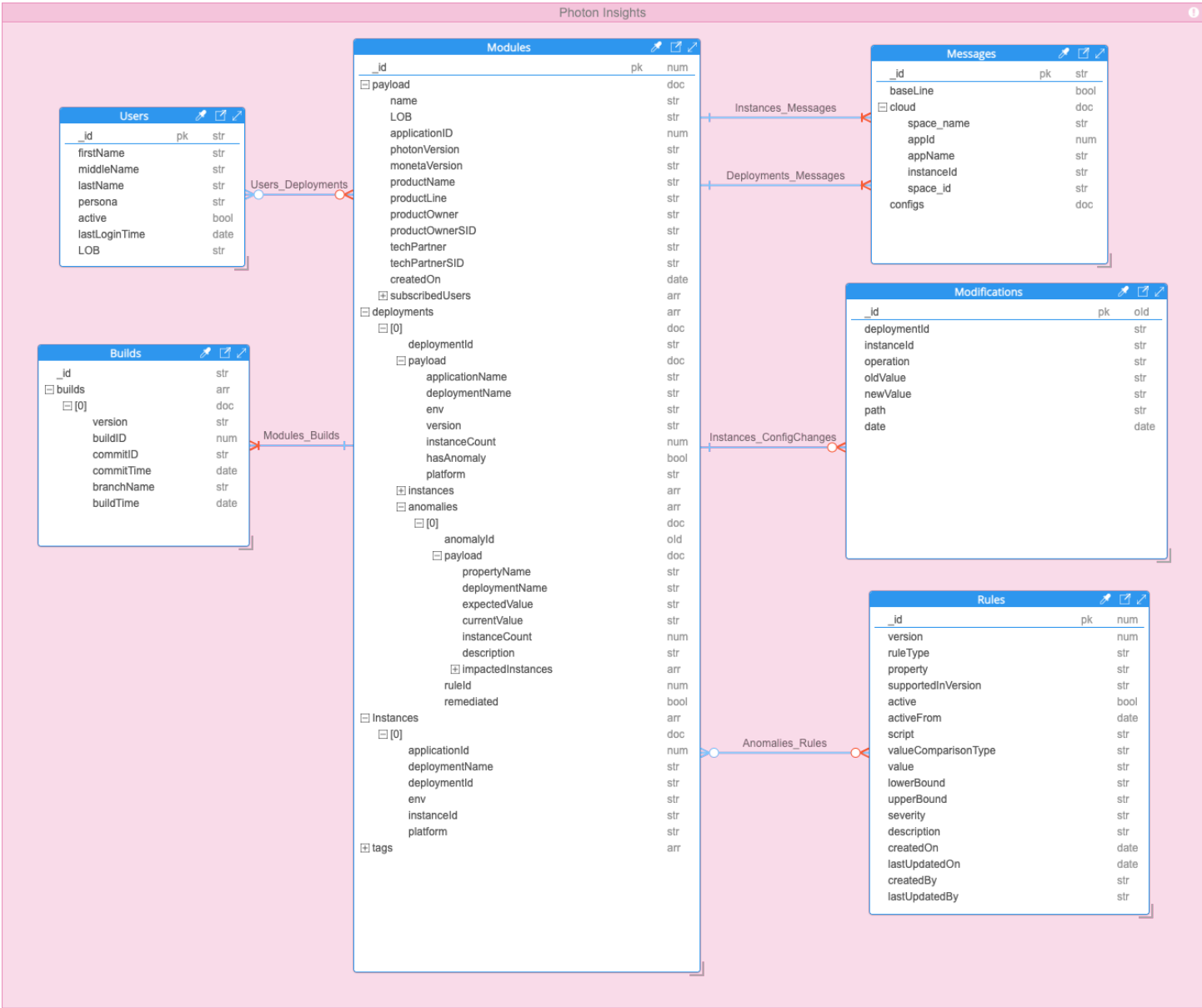
2.1.1 Photon Insights Properties

PROPERTY	VALUE
Database name	Photon Insights
Technical name	
Activated	true
Enable sharding	
Description	
Comments	

2.1.2 Photon Insights Collections

2.1.2.1 Collection Modules

2.1.2.1.1 Modules Tree Diagram
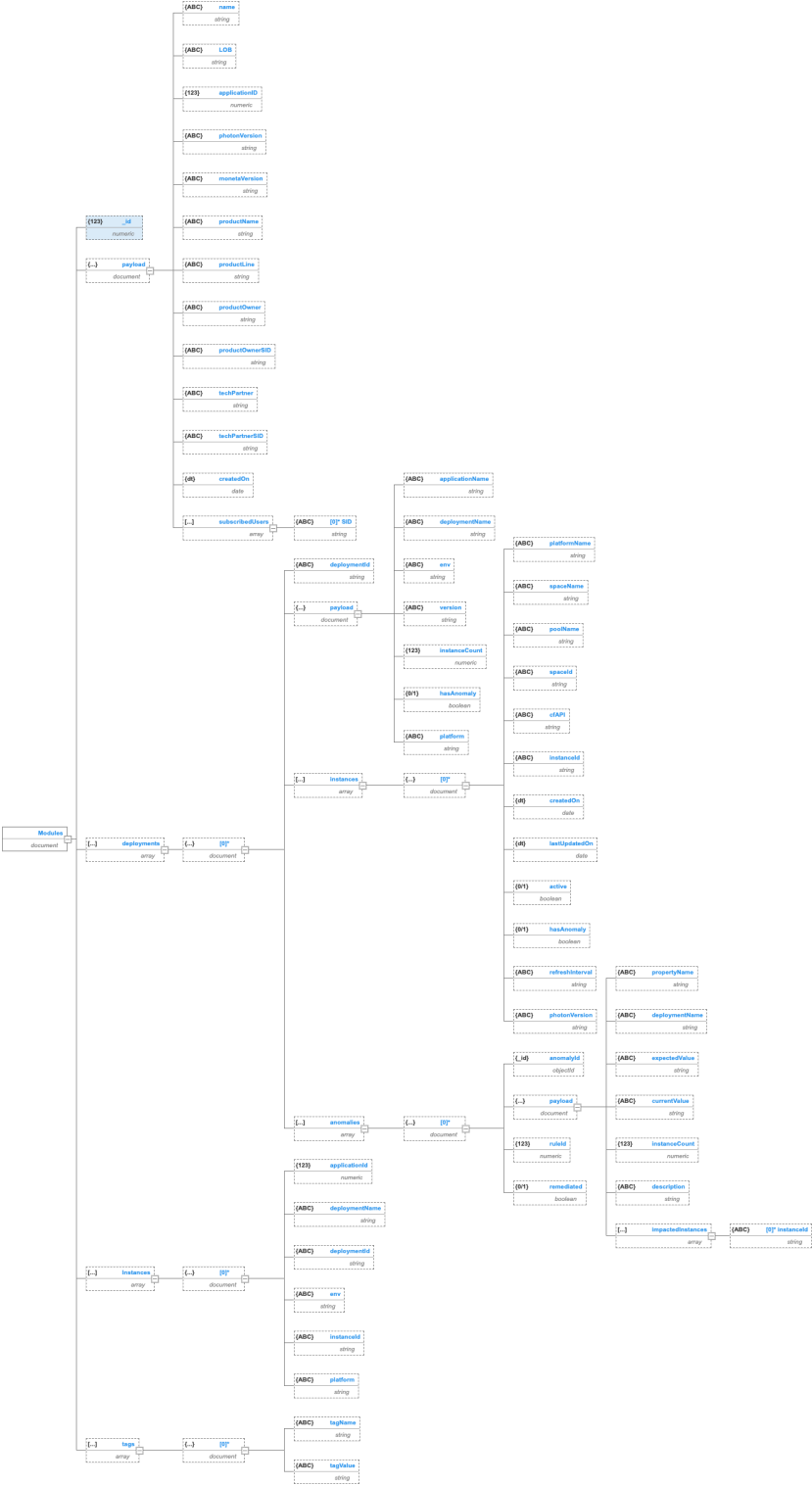
2.1.2.1.2 Modules Properties

PROPERTY	VALUE
Collection name	Modules
Technical name	
Activated	true
Id	
$ref	
Description	
Database	Photon Insights
Capped	
Time series	
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Off
Validation action	Warn
Encryption metadata	
Additional properties	false
Workload analysis	
[1] Actor	
Description	
Number of documents	
Avg document size (Bytes)	
Read-to-Write ratio	
Keep forever	
Retention (months)	
Write operations	
Read operations	
Comments	The Modules collection will be used to populate the initial landing page. As every document in the collection is going to be returned, I recommend using a clustered collection to store this data as it'll mean the data is stored efficiently on disk for retrieval. The value of the _id field in this collection should be immutable, sequentially increasing and as small as possible. If the numeric primary keys from the Oracle implementation meet these requirements, they can be reused, otherwise I'd use the default MongoDB ObjectID values. The payload section of the document are fields used only to populate the UI - there are no searches or calculations carried out on these fields and they are included in their own section of the document to facilitate efficient document scanning. I've included tags in an embedded array, eliminating the need for a separate Tags collection, although I'm not clear where tags are actually used.

PROPERTY	VALUE
	Likewise, the list of users subscribing to a module is represented as an array within the document, removing the need for a bridging table (as used in Oracle) to map the many-to-many relationship tot he Users collection. However, I'm not sure if the Users collection is actually necessary. As far as driving the UI is concerned, I didn't see any use for it. The Deployments collection will contain one document for each module and will be used to populate the deployments UI

2.1.2.1.3 Modules Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
_id	numeric	false	pk		MODULE_ID from MODULE table in Oracle schema.
payload	document	false			
name	string	false			
LOB	string	false			from product table in Oracle
applicationID	numeric	false			From SEAL table in Oracle
photonVersion	string	false			
monetaVersion	string	false			
productName	string	false			From product table in Oracle
productLine	string	false			From PRODUCT table in Oracle
productOwner	string	false			From PRODUCT table in Oracle
productOwnerSID	string	false			From PRODUCT table in Oracle
techPartner	string	false			From PRODUCT table in Oracle
techPartnerSID	string	false			From PRODUCT table in Oracle
createdOn	date	false			
subscribedUsers	array	false			
[0] SID	string	false			
deployments	array	false			
[0]	document	false			
deploymentId	string	false			
payload	document	false			
applicationName	string	false			
deploymentName	string	false			
env	string	false			
version	string	false			
instanceCount	numeric	false			
hasAnomaly	boolean	false			
platform	string	false			
instances	array	false			Entries in this array can be polymorphic for each environment type - GAP, GKP, ON_PREM etc. Example shows fields for a GAP deployment.
[0]	document	false			
platformName	string	false			
spaceName	string	false			
poolName	string	false			

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
spaceId	string	false			
cfAPI	string	false			
instanceId	string	false			
createdOn	date	false			
lastUpdatedOn	date	false			
active	boolean	false			
hasAnomaly	boolean	false			
refreshInterval	string	false			
photonVersion	string	false			
anomalies	array	false			
[0]	document	false			
anomalyId	objectId	false			
payload	document	false			
propertyName	string	false			
deploymentName	string	false			
expectedValue	string	false			
currentValue	string	false			
instanceCount	numeric	false			
description	string	false			
impactedInstances	array	false			
[0] instanceId	string	false			
ruleId	numeric	false			
remediated	boolean	false			
Instances	array	false			
[0]	document	false			
applicationId	numeric	false			
deploymentName	string	false			
deploymentId	string	false			
env	string	false			
instanceId	string	false			
platform	string	false			
tags	array	false			
[0]	document	false			
tagName	string	false			
tagValue	string	false			

2.1.2.1.3.1 Field _id

2.1.2.1.3.1.1 _id Tree Diagram

2.1.2.1.3.1.2 _id properties

PROPERTY	VALUE
Name	_id
Technical name	deploymentID
Activated	true
Id	
Field-level encryption	
Type	numeric
Subtype	
Description	
Dependencies	
Required	
Primary key	true
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Unit	
Min value	
Excl min	
Max value	
Excl max	
Multiple of	
Divisible by	
Enum	
Faker function	
Sample	
Comments	MODULE_ID from MODULE table in Oracle schema.

2.1.2.1.3.2 Field payload

2.1.2.1.3.2.1 payload Tree Diagram

| {ABC} | **name** |
| | string |

| {ABC} | **LOB** |
| | string |

| {123} | **applicationID** |
| | numeric |

| {ABC} | **photonVersion** |
| | string |

| {ABC} | **monetaVersion** |
| | string |

| {ABC} | **productName** |
| | string |

| {...} | **payload** | {ABC} | **productLine** |
| document | | | string |

| {ABC} | **productOwner** |
| | string |

| {ABC} | **productOwnerSID** |
| | string |

| {ABC} | **techPartner** |
| | string |

| {ABC} | **techPartnerSID** |
| | string |

| {dt} | **createdOn** |
| | date |

| [...] | **subscribedUsers** |
| | array |

2.1.2.1.3.2.2 payload Hierarchy

Parent field: **Modules**
Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
name	string	false			
LOB	string	false			from product table in Oracle
applicationID	numeric	false			From SEAL table in Oracle
photonVersion	string	false			
monetaVersion	string	false			
productName	string	false			From product table in Oracle
productLine	string	false			From PRODUCT table in Oracle
productOwner	string	false			From PRODUCT table in Oracle
productOwnerSID	string	false			From PRODUCT table in Oracle
techPartner	string	false			From PRODUCT table in Oracle
techPartnerSID	string	false			From PRODUCT table in Oracle
createdOn	date	false			
subscribedUsers	array	false			

2.1.2.1.3.2.3 payload properties

PROPERTY	VALUE
Name	payload
Technical name	
Activated	true
Id	
Field-level encryption	
Type	document
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.2.1.3.3 Field name

2.1.2.1.3.3.1 name Tree Diagram

{ABC}   **name**
          string

2.1.2.1.3.3.2 name properties

PROPERTY	VALUE
Name	name
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.4 Field LOB

2.1.2.1.3.4.1 LOB Tree Diagram

{ABC}   **LOB**
          string

2.1.2.1.3.4.2 LOB properties

PROPERTY	VALUE
Name	LOB
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	from product table in Oracle

2.1.2.1.3.5 Field applicationID

2.1.2.1.3.5.1 applicationID Tree Diagram

{123}   **applicationID**

numeric

2.1.2.1.3.5.2 applicationID properties

PROPERTY	VALUE
Name	applicationID
Technical name	
Activated	true
Id	
Field-level encryption	
Type	numeric
Subtype	
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Unit	
Min value	
Excl min	
Max value	
Excl max	
Multiple of	
Divisible by	
Enum	
Faker function	
Sample	
Comments	From SEAL table in Oracle

2.1.2.1.3.6 Field photonVersion

2.1.2.1.3.6.1 photonVersion Tree Diagram

2.1.2.1.3.6.2 photonVersion properties

PROPERTY	VALUE
Name	photonVersion
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.7 Field monetaVersion

2.1.2.1.3.7.1 monetaVersion Tree Diagram

{ABC}   monetaVersion
                    string

2.1.2.1.3.7.2 monetaVersion properties

PROPERTY	VALUE
Name	monetaVersion
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.8 Field productName

2.1.2.1.3.8.1 productName Tree Diagram

{ABC}   productName
              string

2.1.2.1.3.8.2 productName properties

PROPERTY	VALUE
Name	productName
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	From product table in Oracle

2.1.2.1.3.9 Field productLine

2.1.2.1.3.9.1 productLine Tree Diagram

2.1.2.1.3.9.2 productLine properties

PROPERTY	VALUE
Name	productLine
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	From PRODUCT table in Oracle

2.1.2.1.3.10 Field productOwner

2.1.2.1.3.10.1 productOwner Tree Diagram

{ABC}   productOwner
                 string

2.1.2.1.3.10.2 productOwner properties

PROPERTY	VALUE
Name	productOwner
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	From PRODUCT table in Oracle

2.1.2.1.3.11 Field productOwnerSID

2.1.2.1.3.11.1 productOwnerSID Tree Diagram

{ABC}   productOwnerSID
                string

2.1.2.1.3.11.2 productOwnerSID properties

PROPERTY	VALUE
Name	productOwnerSID
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	From PRODUCT table in Oracle

2.1.2.1.3.12 Field techPartner

2.1.2.1.3.12.1 techPartner Tree Diagram

2.1.2.1.3.12.2 techPartner properties

PROPERTY	VALUE
Name	techPartner
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	From PRODUCT table in Oracle

2.1.2.1.3.13 Field techPartnerSID

2.1.2.1.3.13.1 techPartnerSID Tree Diagram

{ABC} techPartnerSID
  string

2.1.2.1.3.13.2 techPartnerSID properties

PROPERTY	VALUE
Name	techPartnerSID
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	From PRODUCT table in Oracle

2.1.2.1.3.14 Field createdOn

2.1.2.1.3.14.1 createdOn Tree Diagram

2.1.2.1.3.14.2 createdOn properties

PROPERTY	VALUE
Name	createdOn
Technical name	
Activated	true
Id	
Field-level encryption	
Type	date
Description	
Dependencies	
Required	
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Now	
Faker function	
Sample	
Comments	

2.1.2.1.3.15 Field subscribedUsers

2.1.2.1.3.15.1 subscribedUsers Tree Diagram

2.1.2.1.3.15.2 subscribedUsers Hierarchy

Parent field: **payload**
Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0] SID	string	false			

2.1.2.1.3.15.3 subscribedUsers properties

PROPERTY	VALUE
Name	subscribedUsers
Technical name	
Activated	true
Id	
Field-level encryption	
Type	array
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Min items	
Max items	
Unique items	
Additional items	true
Quantification	
Comments	

2.1.2.1.3.16 Field [0] SID

2.1.2.1.3.16.1 [0] SID Tree Diagram

2.1.2.1.3.16.2 [0] SID properties

PROPERTY	VALUE
Display name	SID
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Primary key	
Dependencies	
Foreign collection	Users
Foreign field	_id
Relationship type	
Relationship name	Users_Deployments
Cardinality	0..n
Faker function	
Sample	
Comments	

2.1.2.1.3.17 Field deployments

2.1.2.1.3.17.1 deployments Tree Diagram
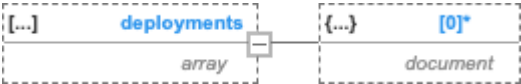
2.1.2.1.3.17.2 deployments Hierarchy

Parent field: **Modules**
Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0]	document	false			

2.1.2.1.3.17.3 deployments properties

PROPERTY	VALUE
Name	deployments
Technical name	
Activated	true
Id	
Field-level encryption	
Type	array
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Min items	
Max items	
Unique items	
Additional items	true
Quantification	
Comments	

2.1.2.1.3.18 Field [0]

2.1.2.1.3.18.1 [0] Tree Diagram
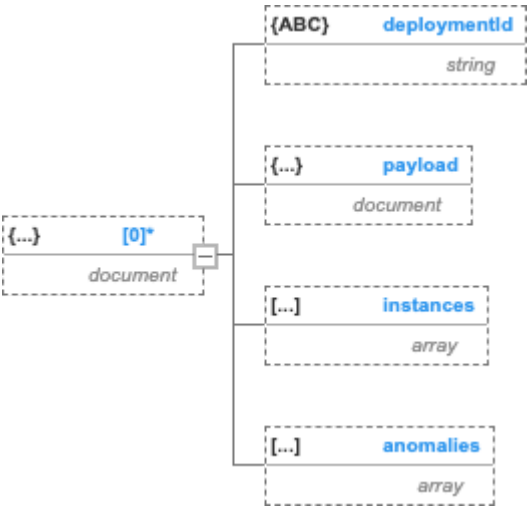
2.1.2.1.3.18.2 [0] Hierarchy

Parent field: **deployments**
Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
deploymentId	string	false			
payload	document	false			
instances	array	false			Entries in this array can be polymorphic for each environment type - GAP, GKP, ON_PREM etc. Example shows fields for a GAP deployment.
anomalies	array	false			

2.1.2.1.3.18.3 [0] properties

PROPERTY	VALUE
Display name	
Activated	true
Id	
Field-level encryption	
Type	document
Description	
Dependencies	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.2.1.3.19 Field deploymentId

2.1.2.1.3.19.1 deploymentId Tree Diagram

2.1.2.1.3.19.2 deploymentId properties

PROPERTY	VALUE
Name	deploymentId
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.20 Field payload

2.1.2.1.3.20.1 payload Tree Diagram
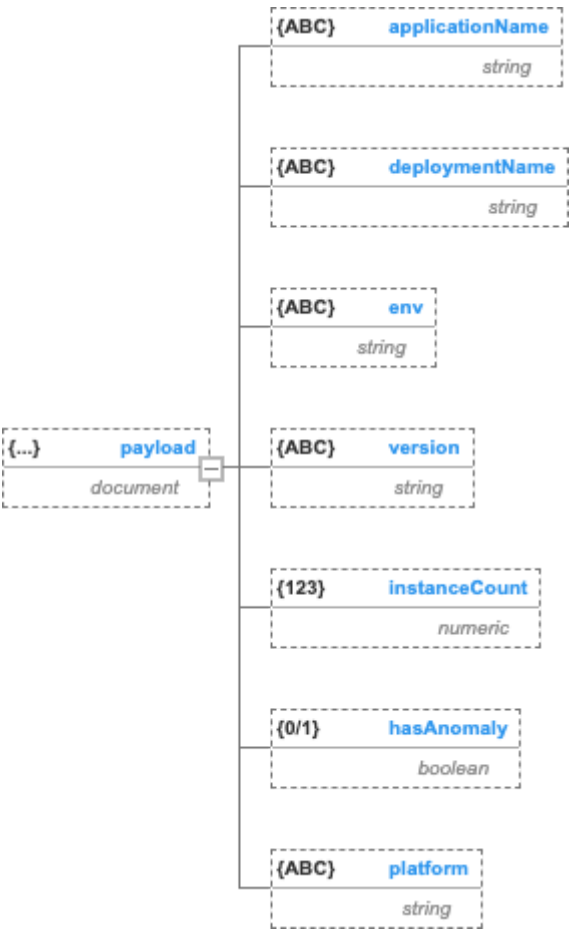
2.1.2.1.3.20.2 payload Hierarchy

Parent field: **[0]**
Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
applicationName	string	false			
deploymentName	string	false			
env	string	false			
version	string	false			
instanceCount	numeric	false			
hasAnomaly	boolean	false			
platform	string	false			

2.1.2.1.3.20.3 payload properties

PROPERTY	VALUE
Name	payload
Technical name	
Activated	true
Id	
Field-level encryption	
Type	document
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.2.1.3.21 Field applicationName

2.1.2.1.3.21.1 applicationName Tree Diagram

{ABC}   applicationName
                  string

2.1.2.1.3.21.2 applicationName properties

PROPERTY	VALUE
Name	applicationName
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.22 Field deploymentName

2.1.2.1.3.22.1 deploymentName Tree Diagram

{ABC}   deploymentName
                     string

2.1.2.1.3.22.2 deploymentName properties

PROPERTY	VALUE
Name	deploymentName
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.23 Field env

2.1.2.1.3.23.1 env Tree Diagram

{ABC}   env
    string

2.1.2.1.3.23.2 env properties

PROPERTY	VALUE
Name	env
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.24 Field version

2.1.2.1.3.24.1 version Tree Diagram

{ABC}   version
              string

2.1.2.1.3.24.2 version properties

PROPERTY	VALUE
Name	version
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.25 Field instanceCount

2.1.2.1.3.25.1 instanceCount Tree Diagram

2.1.2.1.3.25.2 instanceCount properties

PROPERTY	VALUE
Name	instanceCount
Technical name	
Activated	true
Id	
Field-level encryption	
Type	numeric
Subtype	
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Unit	
Min value	
Excl min	
Max value	
Excl max	
Multiple of	
Divisible by	
Enum	
Faker function	
Sample	
Comments	

2.1.2.1.3.26 Field hasAnomaly

2.1.2.1.3.26.1 hasAnomaly Tree Diagram
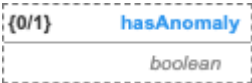
2.1.2.1.3.26.2 hasAnomaly properties

PROPERTY	VALUE
Name	hasAnomaly
Technical name	
Activated	true
Id	
Field-level encryption	
Type	boolean
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Sample	
Comments	

2.1.2.1.3.27 Field platform

2.1.2.1.3.27.1 platform Tree Diagram

2.1.2.1.3.27.2 platform properties

PROPERTY	VALUE
Name	platform
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.28 Field instances

2.1.2.1.3.28.1 instances Tree Diagram

2.1.2.1.3.28.2 instances Hierarchy

Parent field: **[0]**
Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0]	document	false			

2.1.2.1.3.28.3 instances properties

PROPERTY	VALUE
Name	instances
Technical name	
Activated	true
Id	
Field-level encryption	
Type	array
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Min items	
Max items	
Unique items	
Additional items	true
Quantification	
Comments	Entries in this array can be polymorphic for each environment type - GAP, GKP, ON_PREM etc. Example shows fields for a GAP deployment.

2.1.2.1.3.29 Field [0]

2.1.2.1.3.29.1 [0] Tree Diagram
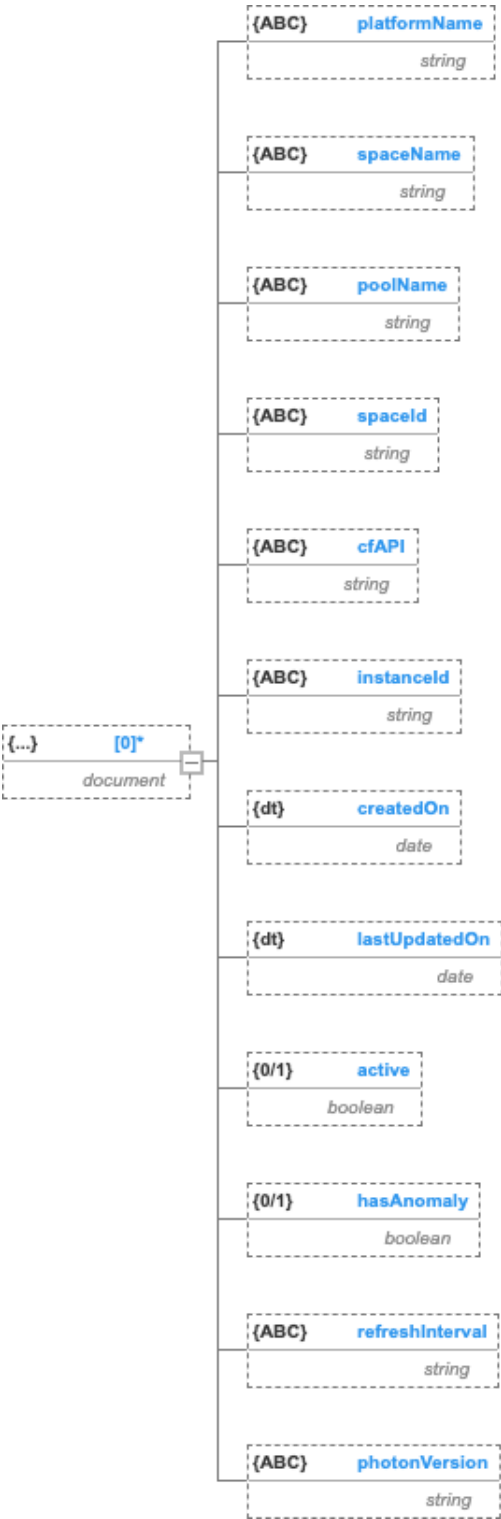
2.1.2.1.3.29.2 [0] Hierarchy

Parent field: **instances**
Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
platformName	string	false			
spaceName	string	false			
poolName	string	false			
spaceId	string	false			
cfAPI	string	false			
instanceId	string	false			
createdOn	date	false			
lastUpdatedOn	date	false			
active	boolean	false			
hasAnomaly	boolean	false			
refreshInterval	string	false			
photonVersion	string	false			

2.1.2.1.3.29.3 [0] properties

PROPERTY	VALUE
Display name	
Activated	true
Id	
Field-level encryption	
Type	document
Description	
Dependencies	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.2.1.3.30 Field platformName

2.1.2.1.3.30.1 platformName Tree Diagram

2.1.2.1.3.30.2 platformName properties

PROPERTY	VALUE
Name	platformName
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.31 Field spaceName

2.1.2.1.3.31.1 spaceName Tree Diagram

2.1.2.1.3.31.2 spaceName properties

PROPERTY	VALUE
Name	spaceName
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.32 Field poolName

2.1.2.1.3.32.1 poolName Tree Diagram

{ABC}   poolName
              string

2.1.2.1.3.32.2 poolName properties

PROPERTY	VALUE
Name	poolName
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.33 Field spaceId

2.1.2.1.3.33.1 spaceId Tree Diagram

2.1.2.1.3.33.2 spaceId properties

PROPERTY	VALUE
Name	spaceId
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.34 Field cfAPI

2.1.2.1.3.34.1 cfAPI Tree Diagram

2.1.2.1.3.34.2 cfAPI properties

PROPERTY	VALUE
Name	cfAPI
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.35 Field instanceId

2.1.2.1.3.35.1 instanceId Tree Diagram

{ABC}   instanceId
              string

2.1.2.1.3.35.2 instanceId properties

PROPERTY	VALUE
Name	instanceId
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	Messages
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.36 Field createdOn

2.1.2.1.3.36.1 createdOn Tree Diagram

2.1.2.1.3.36.2 createdOn properties

PROPERTY	VALUE
Name	createdOn
Technical name	
Activated	true
Id	
Field-level encryption	
Type	date
Description	
Dependencies	
Required	
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Now	
Faker function	
Sample	
Comments	

2.1.2.1.3.37 Field lastUpdatedOn

2.1.2.1.3.37.1 lastUpdatedOn Tree Diagram

2.1.2.1.3.37.2 lastUpdatedOn properties

PROPERTY	VALUE
Name	lastUpdatedOn
Technical name	
Activated	true
Id	
Field-level encryption	
Type	date
Description	
Dependencies	
Required	
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Now	
Faker function	
Sample	
Comments	

2.1.2.1.3.38 Field active

2.1.2.1.3.38.1 active Tree Diagram

2.1.2.1.3.38.2 active properties

PROPERTY	VALUE
Name	active
Technical name	
Activated	true
Id	
Field-level encryption	
Type	boolean
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Sample	
Comments	

2.1.2.1.3.39 Field hasAnomaly

2.1.2.1.3.39.1 hasAnomaly Tree Diagram

2.1.2.1.3.39.2 hasAnomaly properties

PROPERTY	VALUE
Name	hasAnomaly
Technical name	
Activated	true
Id	
Field-level encryption	
Type	boolean
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Sample	
Comments	

2.1.2.1.3.40 Field refreshInterval

2.1.2.1.3.40.1 refreshInterval Tree Diagram

2.1.2.1.3.40.2 refreshInterval properties

PROPERTY	VALUE
Name	refreshInterval
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.41 Field photonVersion

2.1.2.1.3.41.1 photonVersion Tree Diagram

2.1.2.1.3.41.2 photonVersion properties

PROPERTY	VALUE
Name	photonVersion
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.42 Field anomalies

2.1.2.1.3.42.1 anomalies Tree Diagram

2.1.2.1.3.42.2 anomalies Hierarchy

Parent field: **[0]**
Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0]	document	false			

2.1.2.1.3.42.3 anomalies properties

PROPERTY	VALUE
Name	anomalies
Technical name	
Activated	true
Id	
Field-level encryption	
Type	array
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Min items	
Max items	
Unique items	
Additional items	true
Quantification	
Comments	

2.1.2.1.3.43 Field [0]

2.1.2.1.3.43.1 [0] Tree Diagram
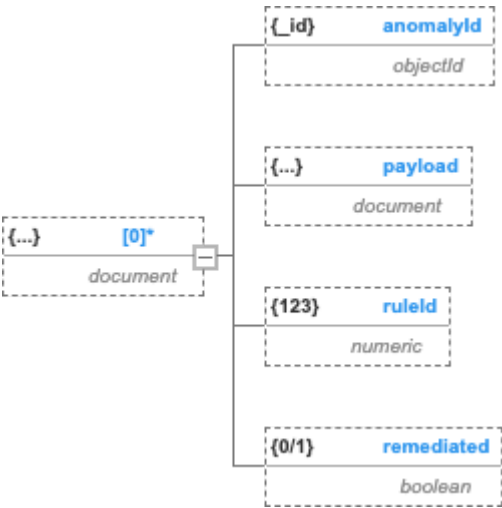
2.1.2.1.3.43.2 [0] Hierarchy

Parent field: **anomalies**
Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
anomalyId	objectId	false			
payload	document	false			
ruleId	numeric	false			
remediated	boolean	false			

2.1.2.1.3.43.3 [0] properties

PROPERTY	VALUE
Display name	
Activated	true
Id	
Field-level encryption	
Type	document
Description	
Dependencies	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.2.1.3.44 Field anomalyId

2.1.2.1.3.44.1 anomalyId Tree Diagram

2.1.2.1.3.44.2 anomalyId properties

PROPERTY	VALUE
Name	anomalyId
Technical name	
Activated	true
Id	
Field-level encryption	
Type	objectId
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Sample	
Comments	

2.1.2.1.3.45 Field payload

2.1.2.1.3.45.1 payload Tree Diagram
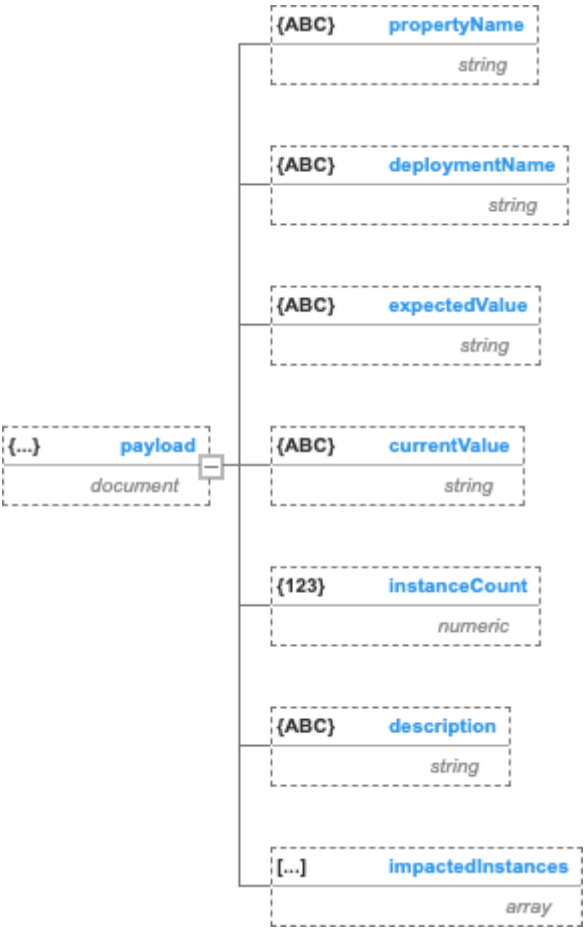
2.1.2.1.3.45.2 payload Hierarchy

Parent field: **[0]**
Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
propertyName	string	false			
deploymentName	string	false			
expectedValue	string	false			
currentValue	string	false			
instanceCount	numeric	false			
description	string	false			
impactedInstances	array	false			

2.1.2.1.3.45.3 payload properties

PROPERTY	VALUE
Name	payload
Technical name	
Activated	true
Id	
Field-level encryption	
Type	document
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.2.1.3.46 Field propertyName

2.1.2.1.3.46.1 propertyName Tree Diagram

{ABC}   propertyName
            string

2.1.2.1.3.46.2 propertyName properties

PROPERTY	VALUE
Name	propertyName
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.47 Field deploymentName

2.1.2.1.3.47.1 deploymentName Tree Diagram

{ABC}   deploymentName
                string

2.1.2.1.3.47.2 deploymentName properties

PROPERTY	VALUE
Name	deploymentName
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.48 Field expectedValue

2.1.2.1.3.48.1 expectedValue Tree Diagram

{ABC} expectedValue
string

2.1.2.1.3.48.2 expectedValue properties

PROPERTY	VALUE
Name	expectedValue
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.49 Field currentValue

2.1.2.1.3.49.1 currentValue Tree Diagram

{ABC}   currentValue
                  string

2.1.2.1.3.49.2 currentValue properties

PROPERTY	VALUE
Name	currentValue
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.50 Field instanceCount

2.1.2.1.3.50.1 instanceCount Tree Diagram

```
{123}        instanceCount
                  numeric
```

2.1.2.1.3.50.2 instanceCount properties

PROPERTY	VALUE
Name	instanceCount
Technical name	
Activated	true
Id	
Field-level encryption	
Type	numeric
Subtype	
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Unit	
Min value	
Excl min	
Max value	
Excl max	
Multiple of	
Divisible by	
Enum	
Faker function	
Sample	
Comments	

2.1.2.1.3.51 Field description

2.1.2.1.3.51.1 description Tree Diagram

2.1.2.1.3.51.2 description properties

PROPERTY	VALUE
Name	description
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.52 Field impactedInstances

2.1.2.1.3.52.1 impactedInstances Tree Diagram

2.1.2.1.3.52.2 impactedInstances Hierarchy

Parent field: **payload**
Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0] instanceId	string	false			

2.1.2.1.3.52.3 impactedInstances properties

PROPERTY	VALUE
Name	impactedInstances
Technical name	
Activated	true
Id	
Field-level encryption	
Type	array
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Min items	
Max items	
Unique items	
Additional items	true
Quantification	
Comments	

2.1.2.1.3.53 Field [0] instanceId

2.1.2.1.3.53.1 [0] instanceId Tree Diagram

{ABC}   [0]* instanceId
                    string

2.1.2.1.3.53.2 [0] instanceId properties

PROPERTY	VALUE
Display name	instanceId
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.54 Field ruleId

2.1.2.1.3.54.1 ruleId Tree Diagram

{123} ruleId

numeric

2.1.2.1.3.54.2 ruleId properties

PROPERTY	VALUE
Name	ruleId
Technical name	
Activated	true
Id	
Field-level encryption	
Type	numeric
Subtype	
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Unit	
Min value	
Excl min	
Max value	
Excl max	
Multiple of	
Divisible by	
Enum	
Faker function	
Sample	
Comments	

2.1.2.1.3.55 Field remediated

2.1.2.1.3.55.1 remediated Tree Diagram

2.1.2.1.3.55.2 remediated properties

PROPERTY	VALUE
Name	remediated
Technical name	
Activated	true
Id	
Field-level encryption	
Type	boolean
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Sample	
Comments	

2.1.2.1.3.56 Field Instances

2.1.2.1.3.56.1 Instances Tree Diagram

2.1.2.1.3.56.2 Instances Hierarchy

Parent field: **Modules**
Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0]	document	false			

2.1.2.1.3.56.3 Instances properties

PROPERTY	VALUE
Name	Instances
Technical name	
Activated	true
Id	
Field-level encryption	
Type	array
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Min items	
Max items	
Unique items	
Additional items	true
Quantification	
Comments	

2.1.2.1.3.57 Field [0]

2.1.2.1.3.57.1 [0] Tree Diagram
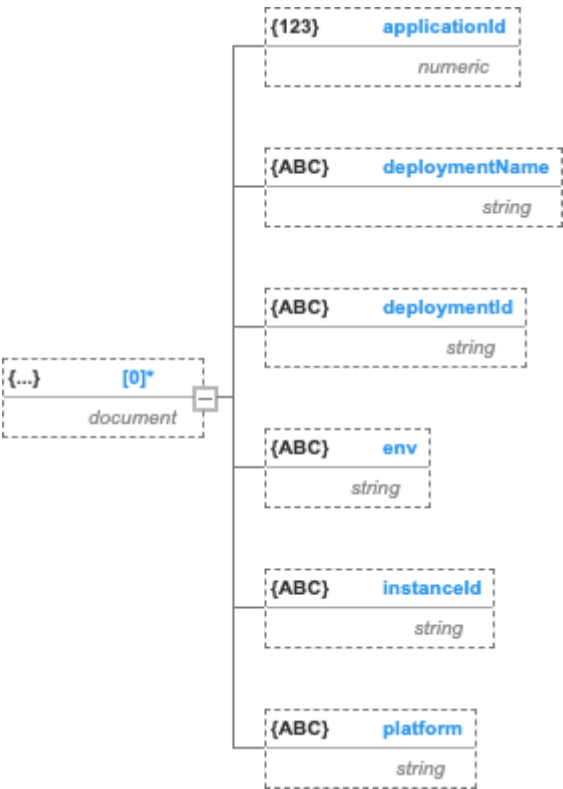
2.1.2.1.3.57.2 [0] Hierarchy

Parent field: **Instances**
Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
applicationId	numeric	false			
deploymentName	string	false			
deploymentId	string	false			
env	string	false			
instanceId	string	false			
platform	string	false			

2.1.2.1.3.57.3 [0] properties

PROPERTY	VALUE
Display name	
Activated	true
Id	
Field-level encryption	
Type	document
Description	
Dependencies	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.2.1.3.58 Field applicationId

2.1.2.1.3.58.1 applicationId Tree Diagram

{123} applicationId
            numeric

2.1.2.1.3.58.2 applicationId properties

PROPERTY	VALUE
Name	applicationId
Technical name	
Activated	true
Id	
Field-level encryption	
Type	numeric
Subtype	
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Unit	
Min value	
Excl min	
Max value	
Excl max	
Multiple of	
Divisible by	
Enum	
Faker function	
Sample	
Comments	

2.1.2.1.3.59 Field deploymentName

2.1.2.1.3.59.1 deploymentName Tree Diagram

```
{ABC}      deploymentName
                    string
```

2.1.2.1.3.59.2 deploymentName properties

PROPERTY	VALUE
Name	deploymentName
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.60 Field deploymentId

2.1.2.1.3.60.1 deploymentId Tree Diagram

2.1.2.1.3.60.2 deploymentId properties

PROPERTY	VALUE
Name	deploymentId
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.61 Field env

2.1.2.1.3.61.1 env Tree Diagram

{ABC}   env
        string

2.1.2.1.3.61.2 env properties

PROPERTY	VALUE
Name	env
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.62 Field instanceId

2.1.2.1.3.62.1 instanceId Tree Diagram

{ABC}   instanceId
        string

2.1.2.1.3.62.2 instanceId properties

PROPERTY	VALUE
Name	instanceId
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.63 Field platform

2.1.2.1.3.63.1 platform Tree Diagram

2.1.2.1.3.63.2 platform properties

PROPERTY	VALUE
Name	platform
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.64 Field tags

2.1.2.1.3.64.1 tags Tree Diagram
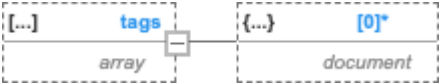
2.1.2.1.3.64.2 tags Hierarchy

Parent field: **Modules**
Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0]	document	false			

2.1.2.1.3.64.3 tags properties

PROPERTY	VALUE
Name	tags
Technical name	
Activated	true
Id	
Field-level encryption	
Type	array
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Min items	
Max items	
Unique items	
Additional items	true
Quantification	
Comments	

2.1.2.1.3.65 Field [0]

2.1.2.1.3.65.1 [0] Tree Diagram
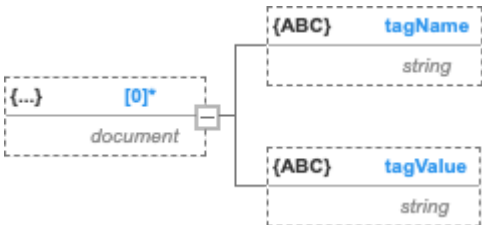
2.1.2.1.3.65.2 [0] Hierarchy

Parent field: **tags**
Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
tagName	string	false			
tagValue	string	false			

2.1.2.1.3.65.3 [0] properties

PROPERTY	VALUE
Display name	
Activated	true
Id	
Field-level encryption	
Type	document
Description	
Dependencies	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.2.1.3.66 Field tagName

2.1.2.1.3.66.1 tagName Tree Diagram

{ABC}   **tagName**
        string

2.1.2.1.3.66.2 tagName properties

PROPERTY	VALUE
Name	tagName
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.3.67 Field tagValue

2.1.2.1.3.67.1 tagValue Tree Diagram

2.1.2.1.3.67.2 tagValue properties

PROPERTY	VALUE
Name	tagValue
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.1.4 Modules JSON Schema

```
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "type": "object",
    "title": "Modules",
    "properties": {
        "deploymentID": {
            "type": "number",
            "title": "_id"
        },
        "payload": {
            "type": "object",
            "properties": {
                "name": {
                    "type": "string"
                },
                "LOB": {
                    "type": "string"
                },
                "applicationID": {
                    "type": "number"
                },
                "photonVersion": {
                    "type": "string"
                },
                "monetaVersion": {
                    "type": "string"
                },
                "productName": {
                    "type": "string"
                },
                "productLine": {
                    "type": "string"
                },
                "productOwner": {
                    "type": "string"
                },
                "productOwnerSID": {
                    "type": "string"
                },
                "techPartner": {
                    "type": "string"
                },
                "techPartnerSID": {
                    "type": "string"
                },
                "createdOn": {
                    "type": "string",
                    "format": "date"
                },
                "subscribedUsers": {
                    "type": "array",
                    "additionalItems": true,
                    "items": {
                        "type": "string"
                    }
                }
            },
            "additionalProperties": false
        },
        "deployments": {
```

```
            "type": "array",
          "additionalItems": true,
          "items": {
            "type": "object",
            "properties": {
              "deploymentId": {
                "type": "string"
              },
              "payload": {
                "type": "object",
                "properties": {
                  "applicationName": {
                    "type": "string"
                  },
                  "deploymentName": {
                    "type": "string"
                  },
                  "env": {
                    "type": "string"
                  },
                  "version": {
                    "type": "string"
                  },
                  "instanceCount": {
                    "type": "number"
                  },
                  "hasAnomaly": {
                    "type": "boolean"
                  },
                  "platform": {
                    "type": "string"
                  }
                },
                "additionalProperties": false
              },
              "instances": {
                "type": "array",
                "additionalItems": true,
                "items": {
                  "type": "object",
                  "properties": {
                    "platformName": {
                      "type": "string"
                    },
                    "spaceName": {
                      "type": "string"
                    },
                    "poolName": {
                      "type": "string"
                    },
                    "spaceId": {
                      "type": "string"
                    },
                    "cfAPI": {
                      "type": "string"
                    },
                    "instanceId": {
                      "type": "string"
                    },
                    "createdOn": {
                      "type": "string",
```

```
                                "format": "date"
                              },
                              "lastUpdatedOn": {
                                "type": "string",
                                "format": "date"
                              },
                              "active": {
                                "type": "boolean"
                              },
                              "hasAnomaly": {
                                "type": "boolean"
                              },
                              "refreshInterval": {
                                "type": "string"
                              },
                              "photonVersion": {
                                "type": "string"
                              }
                            },
                            "additionalProperties": false
                          }
                        },
                        "anomalies": {
                          "type": "array",
                          "additionalItems": true,
                          "items": {
                            "type": "object",
                            "properties": {
                              "anomalyId": {
                                "type": "string",
                                "pattern": "^[a-fA-F0-9]{24}$"
                              },
                              "payload": {
                                "type": "object",
                                "properties": {
                                  "propertyName": {
                                    "type": "string"
                                  },
                                  "deploymentName": {
                                    "type": "string"
                                  },
                                  "expectedValue": {
                                    "type": "string"
                                  },
                                  "currentValue": {
                                    "type": "string"
                                  },
                                  "instanceCount": {
                                    "type": "number"
                                  },
                                  "description": {
                                    "type": "string"
                                  },
                                  "impactedInstances": {
                                    "type": "array",
                                    "additionalItems": true,
                                    "items": {
                                        "type": "string"
                                    }
                                  }
                                },
```

```
                  "additionalProperties": false
                },
                "ruleId": {
                  "type": "number"
                },
                "remediated": {
                  "type": "boolean"
                }
              },
              "additionalProperties": false
            }
          }
        },
        "additionalProperties": false
      }
    },
    "Instances": {
      "type": "array",
      "additionalItems": true,
      "items": {
        "type": "object",
        "properties": {
          "applicationId": {
            "type": "number"
          },
          "deploymentName": {
            "type": "string"
          },
          "deploymentId": {
            "type": "string"
          },
          "env": {
            "type": "string"
          },
          "instanceId": {
            "type": "string"
          },
          "platform": {
            "type": "string"
          }
        },
        "additionalProperties": false
      }
    },
    "tags": {
      "type": "array",
      "additionalItems": true,
      "items": {
        "type": "object",
        "properties": {
          "tagName": {
            "type": "string"
          },
          "tagValue": {
            "type": "string"
          }
        },
        "additionalProperties": false
      }
    }
  }
},
```

```
    "additionalProperties": false
}
```

2.1.2.1.5 Modules JSON data

```
{
    "deploymentID": 91,
    "payload": {
        "name": "Lorem",
        "LOB": "Lorem",
        "applicationID": 56,
        "photonVersion": "Lorem",
        "monetaVersion": "Lorem",
        "productName": "Lorem",
        "productLine": "Lorem",
        "productOwner": "Lorem",
        "productOwnerSID": "Lorem",
        "techPartner": "Lorem",
        "techPartnerSID": "Lorem",
        "createdOn": ISODate("2016-04-08T15:06:21.595Z"),
        "subscribedUsers": [
            "Lorem"
        ]
    },
    "deployments": [
        {
            "deploymentId": "Lorem",
            "payload": {
                "applicationName": "Lorem",
                "deploymentName": "Lorem",
                "env": "Lorem",
                "version": "Lorem",
                "instanceCount": -47,
                "hasAnomaly": true,
                "platform": "Lorem"
            },
            "instances": [
                {
                    "platformName": "Lorem",
                    "spaceName": "Lorem",
                    "poolName": "Lorem",
                    "spaceId": "Lorem",
                    "cfAPI": "Lorem",
                    "instanceId": "Lorem",
                    "createdOn": ISODate("2016-04-08T15:06:21.595Z"),
                    "lastUpdatedOn": ISODate("2016-04-08T15:06:21.595Z"),
                    "active": true,
                    "hasAnomaly": true,
                    "refreshInterval": "Lorem",
                    "photonVersion": "Lorem"
                }
            ],
            "anomalies": [
                {
                    "anomalyId": ObjectId("9afc4ed34db5b2dd4afb598d"),
                    "payload": {
                        "propertyName": "Lorem",
                        "deploymentName": "Lorem",
                        "expectedValue": "Lorem",
                        "currentValue": "Lorem",
                        "instanceCount": 29,
                        "description": "Lorem",
                        "impactedInstances": [
                            "Lorem"
                        ]
```

```
                },
                "ruleId": 95,
                "remediated": true
            }
        ]
      }
   ],
   "Instances": [
      {
         "applicationId": 40,
         "deploymentName": "Lorem",
         "deploymentId": "Lorem",
         "env": "Lorem",
         "instanceId": "Lorem",
         "platform": "Lorem"
      }
   ],
   "tags": [
      {
         "tagName": "Lorem",
         "tagValue": "Lorem"
      }
   ]
}
```

2.1.2.1.6 Modules Target Script

```
use Photon Insights;

db.createCollection("Modules", {
    "capped": false,
    "validator": {
        "$jsonSchema": {
            "bsonType": "object",
            "title": "Modules",
            "properties": {
                "_id": {
                    "bsonType": "objectId"
                },
                "deploymentID": {
                    "bsonType": "number",
                    "title": "_id"
                },
                "payload": {
                    "bsonType": "object",
                    "properties": {
                        "name": {
                            "bsonType": "string"
                        },
                        "LOB": {
                            "bsonType": "string"
                        },
                        "applicationID": {
                            "bsonType": "number"
                        },
                        "photonVersion": {
                            "bsonType": "string"
                        },
                        "monetaVersion": {
                            "bsonType": "string"
                        },
                        "productName": {
                            "bsonType": "string"
                        },
                        "productLine": {
                            "bsonType": "string"
                        },
                        "productOwner": {
                            "bsonType": "string"
                        },
                        "productOwnerSID": {
                            "bsonType": "string"
                        },
                        "techPartner": {
                            "bsonType": "string"
                        },
                        "techPartnerSID": {
                            "bsonType": "string"
                        },
                        "createdOn": {
                            "bsonType": "date"
                        },
                        "subscribedUsers": {
                            "bsonType": "array",
                            "additionalItems": true,
                            "items": {
                                "bsonType": "string"
```

```
                }
              }
            },
            "additionalProperties": false
          },
          "deployments": {
            "bsonType": "array",
            "additionalItems": true,
            "items": {
              "bsonType": "object",
              "properties": {
                "deploymentId": {
                  "bsonType": "string"
                },
                "payload": {
                  "bsonType": "object",
                  "properties": {
                    "applicationName": {
                      "bsonType": "string"
                    },
                    "deploymentName": {
                      "bsonType": "string"
                    },
                    "env": {
                      "bsonType": "string"
                    },
                    "version": {
                      "bsonType": "string"
                    },
                    "instanceCount": {
                      "bsonType": "number"
                    },
                    "hasAnomaly": {
                      "bsonType": "bool"
                    },
                    "platform": {
                      "bsonType": "string"
                    }
                  },
                  "additionalProperties": false
                },
                "instances": {
                  "bsonType": "array",
                  "additionalItems": true,
                  "items": {
                    "bsonType": "object",
                    "properties": {
                      "platformName": {
                        "bsonType": "string"
                      },
                      "spaceName": {
                        "bsonType": "string"
                      },
                      "poolName": {
                        "bsonType": "string"
                      },
                      "spaceId": {
                        "bsonType": "string"
                      },
                      "cfAPI": {
                        "bsonType": "string"
```

```
            },
            "instanceId": {
              "bsonType": "string"
            },
            "createdOn": {
              "bsonType": "date"
            },
            "lastUpdatedOn": {
              "bsonType": "date"
            },
            "active": {
              "bsonType": "bool"
            },
            "hasAnomaly": {
              "bsonType": "bool"
            },
            "refreshInterval": {
              "bsonType": "string"
            },
            "photonVersion": {
              "bsonType": "string"
            }
          },
          "additionalProperties": false
        }
      },
      "anomalies": {
        "bsonType": "array",
        "additionalItems": true,
        "items": {
          "bsonType": "object",
          "properties": {
            "anomalyId": {
              "bsonType": "objectId"
            },
            "payload": {
              "bsonType": "object",
              "properties": {
                "propertyName": {
                  "bsonType": "string"
                },
                "deploymentName": {
                  "bsonType": "string"
                },
                "expectedValue": {
                  "bsonType": "string"
                },
                "currentValue": {
                  "bsonType": "string"
                },
                "instanceCount": {
                  "bsonType": "number"
                },
                "description": {
                  "bsonType": "string"
                },
                "impactedInstances": {
                  "bsonType": "array",
                  "additionalItems": true,
                  "items": {
                    "bsonType": "string"
```

```
                      }
                    }
                  },
                  "additionalProperties": false
                },
                "ruleId": {
                  "bsonType": "number"
                },
                "remediated": {
                  "bsonType": "bool"
                }
              },
              "additionalProperties": false
            }
          }
        },
        "additionalProperties": false
      }
    },
    "Instances": {
      "bsonType": "array",
      "additionalItems": true,
      "items": {
        "bsonType": "object",
        "properties": {
          "applicationId": {
            "bsonType": "number"
          },
          "deploymentName": {
            "bsonType": "string"
          },
          "deploymentId": {
            "bsonType": "string"
          },
          "env": {
            "bsonType": "string"
          },
          "instanceId": {
            "bsonType": "string"
          },
          "platform": {
            "bsonType": "string"
          }
        },
        "additionalProperties": false
      }
    },
    "tags": {
      "bsonType": "array",
      "additionalItems": true,
      "items": {
        "bsonType": "object",
        "properties": {
          "tagName": {
            "bsonType": "string"
          },
          "tagValue": {
            "bsonType": "string"
          }
        },
        "additionalProperties": false
```

```
        }
      }
    },
    "additionalProperties": false
  }
},
"validationLevel": "off",
"validationAction": "warn"
});
```

2.1.2.2 Collection Messages

2.1.2.2.1 Messages Tree Diagram
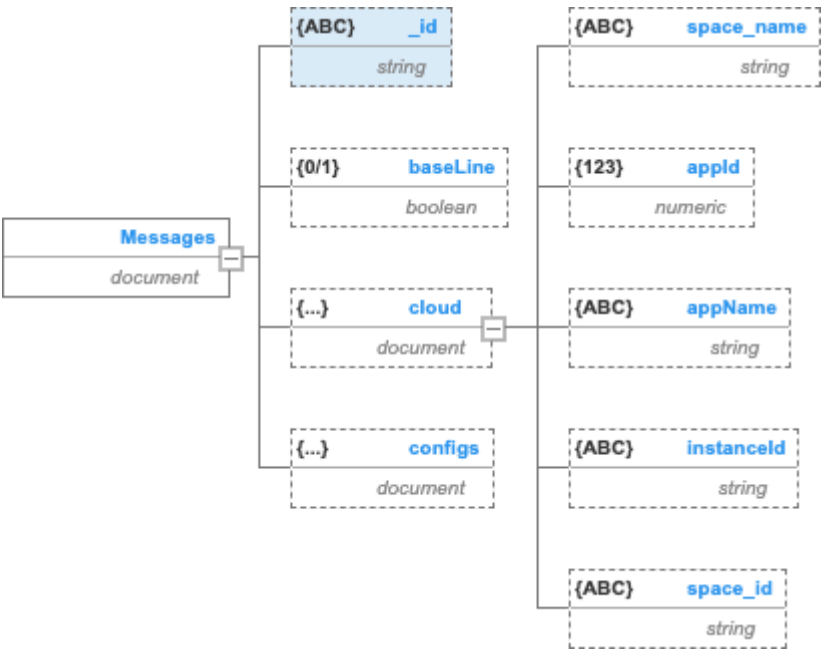
2.1.2.2.2 Messages Properties

PROPERTY	VALUE
Collection name	Messages
Technical name	
Activated	true
Id	
$ref	
Description	
Database	Photon Insights
Capped	
Time series	
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Off
Validation action	Warn
Encryption metadata	
Additional properties	false
Workload analysis	
[1] Actor	
Description	
Number of documents	
Avg document size (Bytes)	
Read-to-Write ratio	
Keep forever	
Retention (months)	
Write operations	
Read operations	
Comments	

2.1.2.2.3 Messages Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
_id	string	false	pk		_id should be set to the instanceId
baseLine	boolean	false			
cloud	document	false			
space_name	string	false			
appId	numeric	false			
appName	string	false			
instanceId	string	false			
space_id	string	false			
configs	document	false			

2.1.2.2.3.1 Field _id

2.1.2.2.3.1.1 _id Tree Diagram

2.1.2.2.3.1.2 _id properties

PROPERTY	VALUE
Name	_id
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	true
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	_id should be set to the instanceId

2.1.2.2.3.2 Field baseLine

2.1.2.2.3.2.1 baseLine Tree Diagram

2.1.2.2.3.2.2 baseLine properties

PROPERTY	VALUE
Name	baseLine
Technical name	
Activated	true
Id	
Field-level encryption	
Type	boolean
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Sample	
Comments	

2.1.2.2.3.3 Field cloud

2.1.2.2.3.3.1 cloud Tree Diagram
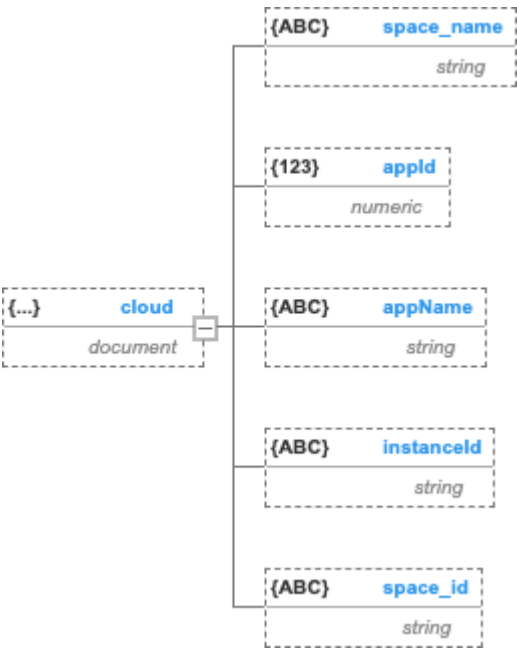
2.1.2.2.3.3.2 cloud Hierarchy

Parent field: **Messages**
Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
space_name	string	false			
appId	numeric	false			
appName	string	false			
instanceId	string	false			
space_id	string	false			

2.1.2.2.3.3.3 cloud properties

PROPERTY	VALUE
Name	cloud
Technical name	
Activated	true
Id	
Field-level encryption	
Type	document
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.2.2.3.4 Field space_name

2.1.2.2.3.4.1 space_name Tree Diagram

{ABC}   **space_name**
        string

2.1.2.2.3.4.2 space_name properties

PROPERTY	VALUE
Name	space_name
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.2.3.5 Field appId

2.1.2.2.3.5.1 appId Tree Diagram

2.1.2.2.3.5.2 appId properties

PROPERTY	VALUE
Name	appId
Technical name	
Activated	true
Id	
Field-level encryption	
Type	numeric
Subtype	
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Unit	
Min value	
Excl min	
Max value	
Excl max	
Multiple of	
Divisible by	
Enum	
Faker function	
Sample	
Comments	

2.1.2.2.3.6 Field appName

2.1.2.2.3.6.1 appName Tree Diagram

2.1.2.2.3.6.2 appName properties

PROPERTY	VALUE
Name	appName
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	Modules
Foreign field	deploymentId
Relationship type	
Relationship name	Deployments_Messages
Cardinality	1..n
Faker function	
Sample	
Comments	

2.1.2.2.3.7 Field instanceId

2.1.2.2.3.7.1 instanceId Tree Diagram

2.1.2.2.3.7.2 instanceId properties

PROPERTY	VALUE
Name	instanceId
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	Modules
Foreign field	instanceId
Relationship type	
Relationship name	Instances_Messages
Cardinality	1..n
Faker function	
Sample	
Comments	

2.1.2.2.3.8 Field space_id

2.1.2.2.3.8.1 space_id Tree Diagram

{ABC}   space_id
              string

2.1.2.2.3.8.2 space_id properties

PROPERTY	VALUE
Name	space_id
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.2.3.9 Field configs

2.1.2.2.3.9.1 configs Tree Diagram

2.1.2.2.3.9.2 configs properties

PROPERTY	VALUE
Name	configs
Technical name	
Activated	true
Id	
Field-level encryption	
Type	document
Description	
Dependencies	
Required	
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.2.2.4 Messages JSON Schema

```
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "type": "object",
    "title": "Messages",
    "properties": {
        "_id": {
            "type": "string"
        },
        "baseLine": {
            "type": "boolean"
        },
        "cloud": {
            "type": "object",
            "properties": {
                "space_name": {
                    "type": "string"
                },
                "appId": {
                    "type": "number"
                },
                "appName": {
                    "type": "string"
                },
                "instanceId": {
                    "type": "string"
                },
                "space_id": {
                    "type": "string"
                }
            },
            "additionalProperties": false
        },
        "configs": {
            "type": "object",
            "additionalProperties": false
        }
    },
    "additionalProperties": false
}
```

2.1.2.2.5 Messages JSON data

```
{
    "_id": "Lorem",
    "baseLine": true,
    "cloud": {
        "space_name": "Lorem",
        "appId": 21,
        "appName": "Lorem",
        "instanceId": "Lorem",
        "space_id": "Lorem"
    },
    "configs": {}
}
```

2.1.2.2.6 Messages Target Script

```
use Photon Insights;

db.createCollection("Messages", {
    "capped": false,
    "validator": {
        "$jsonSchema": {
            "bsonType": "object",
            "title": "Messages",
            "properties": {
                "_id": {
                    "bsonType": "string"
                },
                "baseLine": {
                    "bsonType": "bool"
                },
                "cloud": {
                    "bsonType": "object",
                    "properties": {
                        "space_name": {
                            "bsonType": "string"
                        },
                        "appId": {
                            "bsonType": "number"
                        },
                        "appName": {
                            "bsonType": "string"
                        },
                        "instanceId": {
                            "bsonType": "string"
                        },
                        "space_id": {
                            "bsonType": "string"
                        }
                    },
                    "additionalProperties": false
                },
                "configs": {
                    "bsonType": "object",
                    "additionalProperties": false
                }
            },
            "additionalProperties": false
        }
    },
    "validationLevel": "off",
    "validationAction": "warn"
});
```

2.1.2.3 Collection Modifications

2.1.2.3.1 Modifications Tree Diagram

```
{_id}          _id
               objectId

{ABC}      deploymentId
               string

{ABC}        instanceId
               string

{ABC}        operation
               string

{ABC}        oldValue
               string

{ABC}        newValue
               string

{ABC}        path
               string

{dt}           date
               date
```

Modifications
document
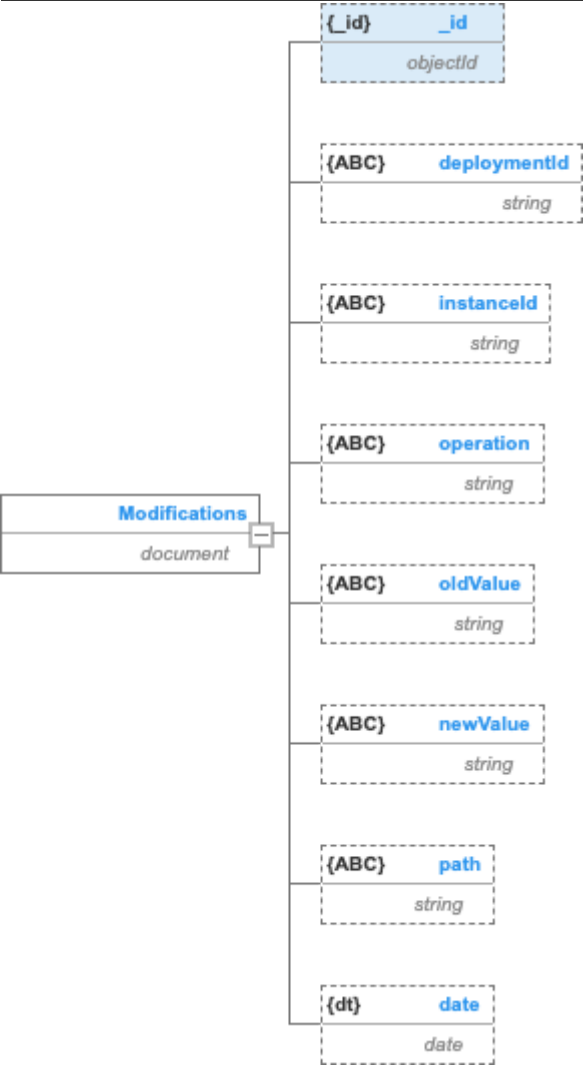
2.1.2.3.2 Modifications Properties

PROPERTY	VALUE
Collection name	Modifications
Technical name	
Activated	true
Id	
$ref	
Description	
Database	Photon Insights
Capped	
Time series	true
Time series options	
Time field	
	date
Meta field	
	instanceId
Granularity	hours
Expire after seconds	
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Off
Validation action	Warn
Encryption metadata	
Additional properties	true
Workload analysis	
[1] Actor	
Description	
Number of documents	
Avg document size (Bytes)	
Read-to-Write ratio	
Keep forever	
Retention (months)	
Write operations	
Read operations	
Comments	

2.1.2.3.3 Modifications Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
_id	objectId	false	pk		
deploymentId	string	false			
instanceId	string	false			
operation	string	false			
oldValue	string	false			
newValue	string	false			
path	string	false			
date	date	false			

2.1.2.3.3.1 Field _id

2.1.2.3.3.1.1 _id Tree Diagram

```
{_id}           _id
            objectId
```

2.1.2.3.3.1.2 _id properties

PROPERTY	VALUE
Name	_id
Technical name	
Activated	true
Id	
Field-level encryption	
Type	objectId
Description	
Dependencies	
Required	
Primary key	true
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Sample	
Comments	

2.1.2.3.3.2 Field deploymentId

2.1.2.3.3.2.1 deploymentId Tree Diagram

```
{ABC}        deploymentId
                  string
```

2.1.2.3.3.2.2 deploymentId properties

PROPERTY	VALUE
Name	deploymentId
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.3.3.3 Field instanceId

2.1.2.3.3.3.1 instanceId Tree Diagram

2.1.2.3.3.3.2 instanceId properties

PROPERTY	VALUE
Name	instanceId
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	Modules
Foreign field	instanceId
Relationship type	
Relationship name	Instances_ConfigChanges
Cardinality	0..n
Faker function	
Sample	
Comments	

2.1.2.3.3.4 Field operation

2.1.2.3.3.4.1 operation Tree Diagram

```
{ABC}      operation
              string
```

2.1.2.3.3.4.2 operation properties

PROPERTY	VALUE
Name	operation
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.3.3.5 Field oldValue

2.1.2.3.3.5.1 oldValue Tree Diagram

2.1.2.3.3.5.2 oldValue properties

PROPERTY	VALUE
Name	oldValue
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.3.3.6 Field newValue

2.1.2.3.3.6.1 newValue Tree Diagram

{ABC}   newValue
            string

2.1.2.3.3.6.2 newValue properties

PROPERTY	VALUE
Name	newValue
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.3.3.7 Field path

2.1.2.3.3.7.1 path Tree Diagram

{ABC}　　path
　　　　string
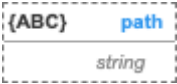
2.1.2.3.3.7.2 path properties

PROPERTY	VALUE
Name	path
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.3.3.8 Field date

2.1.2.3.3.8.1 date Tree Diagram

2.1.2.3.3.8.2 date properties

PROPERTY	VALUE
Name	date
Technical name	
Activated	true
Id	
Field-level encryption	
Type	date
Description	
Dependencies	
Required	
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Now	
Faker function	
Sample	
Comments	

2.1.2.3.4 Modifications JSON Schema

```
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "type": "object",
    "title": "Modifications",
    "properties": {
        "_id": {
            "type": "string",
            "pattern": "^[a-fA-F0-9]{24}$"
        },
        "deploymentId": {
            "type": "string"
        },
        "instanceId": {
            "type": "string"
        },
        "operation": {
            "type": "string"
        },
        "oldValue": {
            "type": "string"
        },
        "newValue": {
            "type": "string"
        },
        "path": {
            "type": "string"
        },
        "date": {
            "type": "string",
            "format": "date"
        }
    },
    "additionalProperties": true
}
```

2.1.2.3.5 Modifications JSON data

```
{
    "_id": ObjectId("e066a0fdffdbff9fb728e0d6"),
    "deploymentId": "Lorem",
    "instanceId": "Lorem",
    "operation": "Lorem",
    "oldValue": "Lorem",
    "newValue": "Lorem",
    "path": "Lorem",
    "date": ISODate("2016-04-08T15:06:21.595Z")
}
```

2.1.2.3.6 Modifications Target Script

```
use Photon Insights;

db.createCollection("Modifications", {
    "capped": false,
    "timeseries": {
        "timeField": "date",
        "metaField": "instanceId",
        "granularity": "hours"
    }
});
```

2.1.2.4 Collection Rules

2.1.2.4.1 Rules Tree Diagram
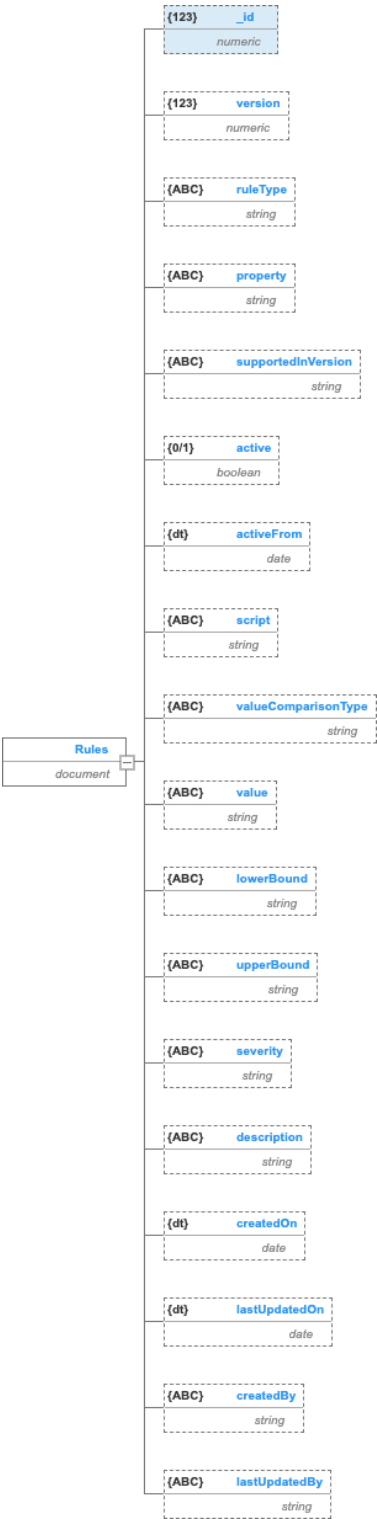
2.1.2.4.2 Rules Properties

PROPERTY	VALUE
Collection name	Rules
Technical name	
Activated	true
Id	
$ref	
Description	
Database	Photon Insights
Capped	
Time series	
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Off
Validation action	Warn
Encryption metadata	
Additional properties	false
Workload analysis	
[1] Actor	
Description	
Number of documents	
Avg document size (Bytes)	
Read-to-Write ratio	
Keep forever	
Retention (months)	
Write operations	
Read operations	
Comments	

2.1.2.4.3 Rules Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
_id	numeric	false	pk		
version	numeric	false			
ruleType	string	false			
property	string	false			
supportedInVersion	string	false			
active	boolean	false			
activeFrom	date	false			
script	string	false			
valueComparisonType	string	false			
value	string	false			
lowerBound	string	false			
upperBound	string	false			
severity	string	false			
description	string	false			
createdOn	date	false			
lastUpdatedOn	date	false			
createdBy	string	false			
lastUpdatedBy	string	false			

2.1.2.4.3.1 Field _id

2.1.2.4.3.1.1 _id Tree Diagram

2.1.2.4.3.1.2 _id properties

PROPERTY	VALUE
Name	_id
Technical name	
Activated	true
Id	
Field-level encryption	
Type	numeric
Subtype	
Description	
Dependencies	
Required	
Primary key	true
Foreign collection	Modules
Foreign field	ruleId
Relationship type	
Relationship name	
Cardinality	
Default	
Unit	
Min value	
Excl min	
Max value	
Excl max	
Multiple of	
Divisible by	
Enum	
Faker function	
Sample	
Comments	

2.1.2.4.3.2 Field version

2.1.2.4.3.2.1 version Tree Diagram

2.1.2.4.3.2.2 version properties

PROPERTY	VALUE
Name	version
Technical name	
Activated	true
Id	
Field-level encryption	
Type	numeric
Subtype	
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Unit	
Min value	
Excl min	
Max value	
Excl max	
Multiple of	
Divisible by	
Enum	
Faker function	
Sample	
Comments	

2.1.2.4.3.3 Field ruleType

2.1.2.4.3.3.1 ruleType Tree Diagram

2.1.2.4.3.3.2 ruleType properties

PROPERTY	VALUE
Name	ruleType
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.4.3.4 Field property

2.1.2.4.3.4.1 property Tree Diagram

2.1.2.4.3.4.2 property properties

PROPERTY	VALUE
Name	property
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.4.3.5 Field supportedInVersion

2.1.2.4.3.5.1 supportedInVersion Tree Diagram

2.1.2.4.3.5.2 supportedInVersion properties

PROPERTY	VALUE
Name	supportedInVersion
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.4.3.6 Field active

2.1.2.4.3.6.1 active Tree Diagram

{0/1} active
boolean

2.1.2.4.3.6.2 active properties

PROPERTY	VALUE
Name	active
Technical name	
Activated	true
Id	
Field-level encryption	
Type	boolean
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Sample	
Comments	

2.1.2.4.3.7 Field activeFrom

2.1.2.4.3.7.1 activeFrom Tree Diagram

2.1.2.4.3.7.2 activeFrom properties

PROPERTY	VALUE
Name	activeFrom
Technical name	
Activated	true
Id	
Field-level encryption	
Type	date
Description	
Dependencies	
Required	
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Now	
Faker function	
Sample	
Comments	

2.1.2.4.3.8 Field script

2.1.2.4.3.8.1 script Tree Diagram

2.1.2.4.3.8.2 script properties

PROPERTY	VALUE
Name	script
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.4.3.9 Field valueComparisonType

2.1.2.4.3.9.1 valueComparisonType Tree Diagram

2.1.2.4.3.9.2 valueComparisonType properties

PROPERTY	VALUE
Name	valueComparisonType
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.4.3.10 Field value

2.1.2.4.3.10.1 value Tree Diagram

2.1.2.4.3.10.2 value properties

PROPERTY	VALUE
Name	value
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.4.3.11 Field lowerBound

2.1.2.4.3.11.1 lowerBound Tree Diagram

2.1.2.4.3.11.2 lowerBound properties

PROPERTY	VALUE
Name	lowerBound
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.4.3.12 Field upperBound

2.1.2.4.3.12.1 upperBound Tree Diagram

2.1.2.4.3.12.2 upperBound properties

PROPERTY	VALUE
Name	upperBound
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.4.3.13 Field severity

2.1.2.4.3.13.1 severity Tree Diagram

{ABC} severity
        string

2.1.2.4.3.13.2 severity properties

PROPERTY	VALUE
Name	severity
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.4.3.14 Field description

2.1.2.4.3.14.1 description Tree Diagram

{ABC} description
string

2.1.2.4.3.14.2 description properties

PROPERTY	VALUE
Name	description
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.4.3.15 Field createdOn

2.1.2.4.3.15.1 createdOn Tree Diagram

2.1.2.4.3.15.2 createdOn properties

PROPERTY	VALUE
Name	createdOn
Technical name	
Activated	true
Id	
Field-level encryption	
Type	date
Description	
Dependencies	
Required	
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Now	
Faker function	
Sample	
Comments	

2.1.2.4.3.16 Field lastUpdatedOn

2.1.2.4.3.16.1 lastUpdatedOn Tree Diagram

2.1.2.4.3.16.2 lastUpdatedOn properties

PROPERTY	VALUE
Name	lastUpdatedOn
Technical name	
Activated	true
Id	
Field-level encryption	
Type	date
Description	
Dependencies	
Required	
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Now	
Faker function	
Sample	
Comments	

2.1.2.4.3.17 Field createdBy

2.1.2.4.3.17.1 createdBy Tree Diagram

2.1.2.4.3.17.2 createdBy properties

PROPERTY	VALUE
Name	createdBy
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.4.3.18 Field lastUpdatedBy

2.1.2.4.3.18.1 lastUpdatedBy Tree Diagram

2.1.2.4.3.18.2 lastUpdatedBy properties

PROPERTY	VALUE
Name	lastUpdatedBy
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.4.4 Rules JSON Schema

```
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "type": "object",
    "title": "Rules",
    "properties": {
        "_id": {
            "type": "number"
        },
        "version": {
            "type": "number"
        },
        "ruleType": {
            "type": "string"
        },
        "property": {
            "type": "string"
        },
        "supportedInVersion": {
            "type": "string"
        },
        "active": {
            "type": "boolean"
        },
        "activeFrom": {
            "type": "string",
            "format": "date"
        },
        "script": {
            "type": "string"
        },
        "valueComparisonType": {
            "type": "string"
        },
        "value": {
            "type": "string"
        },
        "lowerBound": {
            "type": "string"
        },
        "upperBound": {
            "type": "string"
        },
        "severity": {
            "type": "string"
        },
        "description": {
            "type": "string"
        },
        "createdOn": {
            "type": "string",
            "format": "date"
        },
        "lastUpdatedOn": {
            "type": "string",
            "format": "date"
        },
        "createdBy": {
            "type": "string"
        },
        "lastUpdatedBy": {
```

```
      "type": "string"
    }
  },
  "additionalProperties": false
}
```

2.1.2.4.5 Rules JSON data

```
{
  "_id": -96,
  "version": -8,
  "ruleType": "Lorem",
  "property": "Lorem",
  "supportedInVersion": "Lorem",
  "active": true,
  "activeFrom": ISODate("2016-04-08T15:06:21.595Z"),
  "script": "Lorem",
  "valueComparisonType": "Lorem",
  "value": "Lorem",
  "lowerBound": "Lorem",
  "upperBound": "Lorem",
  "severity": "Lorem",
  "description": "Lorem",
  "createdOn": ISODate("2016-04-08T15:06:21.595Z"),
  "lastUpdatedOn": ISODate("2016-04-08T15:06:21.595Z"),
  "createdBy": "Lorem",
  "lastUpdatedBy": "Lorem"
}
```

2.1.2.4.6 Rules Target Script

```
use Photon Insights;

db.createCollection("Rules", {
    "capped": false,
    "validator": {
       "$jsonSchema": {
          "bsonType": "object",
          "title": "Rules",
          "properties": {
             "_id": {
                "bsonType": "number"
             },
             "version": {
                "bsonType": "number"
             },
             "ruleType": {
                "bsonType": "string"
             },
             "property": {
                "bsonType": "string"
             },
             "supportedInVersion": {
                "bsonType": "string"
             },
             "active": {
                "bsonType": "bool"
             },
             "activeFrom": {
                "bsonType": "date"
             },
             "script": {
                "bsonType": "string"
             },
             "valueComparisonType": {
                "bsonType": "string"
             },
             "value": {
                "bsonType": "string"
             },
             "lowerBound": {
                "bsonType": "string"
             },
             "upperBound": {
                "bsonType": "string"
             },
             "severity": {
                "bsonType": "string"
             },
             "description": {
                "bsonType": "string"
             },
             "createdOn": {
                "bsonType": "date"
             },
             "lastUpdatedOn": {
                "bsonType": "date"
             },
             "createdBy": {
                "bsonType": "string"
             },
```

```
        "lastUpdatedBy": {
          "bsonType": "string"
        }
      },
      "additionalProperties": false
    }
  },
  "validationLevel": "off",
  "validationAction": "warn"
});
```

2.1.2.5 Collection Users

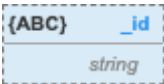### 2.1.2.5.1 Users Tree Diagram
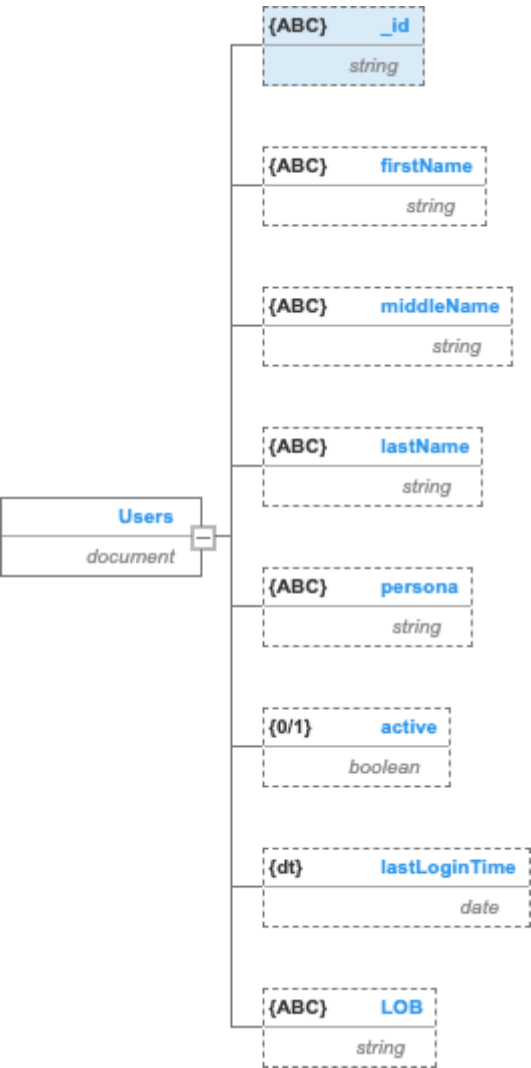
2.1.2.5.2 Users Properties

PROPERTY	VALUE
Collection name	Users
Technical name	
Activated	true
Id	
$ref	
Description	
Database	Photon Insights
Capped	
Time series	
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Off
Validation action	Warn
Encryption metadata	
Additional properties	false
Workload analysis	
[1] Actor	
Description	
Number of documents	
Avg document size (Bytes)	
Read-to-Write ratio	
Keep forever	
Retention (months)	
Write operations	
Read operations	
Comments	

2.1.2.5.3 Users Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
_id	string	false	pk		I've included the User collection, although it's not clear if it's actually necessary or not.
firstName	string	false			
middleName	string	false			
lastName	string	false			
persona	string	false			
active	boolean	false			
lastLoginTime	date	false			
LOB	string	false			

2.1.2.5.3.1 Field _id

2.1.2.5.3.1.1 _id Tree Diagram

2.1.2.5.3.1.2 _id properties

PROPERTY	VALUE
Name	_id
Technical name	SID
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	false
Primary key	true
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	I've included the User collection, although it's not clear if it's actually necessary or not.

2.1.2.5.3.2 Field firstName

2.1.2.5.3.2.1 firstName Tree Diagram

2.1.2.5.3.2.2 firstName properties

PROPERTY	VALUE
Name	firstName
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.5.3.3 Field middleName

2.1.2.5.3.3.1 middleName Tree Diagram

{ABC} middleName
string

2.1.2.5.3.3.2 middleName properties

PROPERTY	VALUE
Name	middleName
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.5.3.4 Field lastName

2.1.2.5.3.4.1 lastName Tree Diagram

2.1.2.5.3.4.2 lastName properties

PROPERTY	VALUE
Name	lastName
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.5.3.5 Field persona

2.1.2.5.3.5.1 persona Tree Diagram

```
{ABC}      persona
              string
```

2.1.2.5.3.5.2 persona properties

PROPERTY	VALUE
Name	persona
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.5.3.6 Field active

2.1.2.5.3.6.1 active Tree Diagram

{0/1}   active

boolean

2.1.2.5.3.6.2 active properties

PROPERTY	VALUE
Name	active
Technical name	
Activated	true
Id	
Field-level encryption	
Type	boolean
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Sample	
Comments	

2.1.2.5.3.7 Field lastLoginTime

2.1.2.5.3.7.1 lastLoginTime Tree Diagram

2.1.2.5.3.7.2 lastLoginTime properties

PROPERTY	VALUE
Name	lastLoginTime
Technical name	
Activated	true
Id	
Field-level encryption	
Type	date
Description	
Dependencies	
Required	
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Now	
Faker function	
Sample	
Comments	

2.1.2.5.3.8 Field LOB

2.1.2.5.3.8.1 LOB Tree Diagram

2.1.2.5.3.8.2 LOB properties

PROPERTY	VALUE
Name	LOB
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.5.4 Users JSON Schema

```
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "type": "object",
    "title": "Users",
    "properties": {
        "SID": {
            "type": "string",
            "title": "_id"
        },
        "firstName": {
            "type": "string"
        },
        "middleName": {
            "type": "string"
        },
        "lastName": {
            "type": "string"
        },
        "persona": {
            "type": "string"
        },
        "active": {
            "type": "boolean"
        },
        "lastLoginTime": {
            "type": "string",
            "format": "date"
        },
        "LOB": {
            "type": "string"
        }
    },
    "additionalProperties": false
}
```

2.1.2.5.5 Users JSON data

```
{
    "SID": "Lorem",
    "firstName": "Lorem",
    "middleName": "Lorem",
    "lastName": "Lorem",
    "persona": "Lorem",
    "active": true,
    "lastLoginTime": ISODate("2016-04-08T15:06:21.595Z"),
    "LOB": "Lorem"
}
```

2.1.2.5.6 Users Target Script

```
use Photon Insights;

db.createCollection("Users", {
    "capped": false,
    "validator": {
      "$jsonSchema": {
        "bsonType": "object",
        "title": "Users",
        "properties": {
          "_id": {
            "bsonType": "objectId"
          },
          "SID": {
            "bsonType": "string",
            "title": "_id"
          },
          "firstName": {
            "bsonType": "string"
          },
          "middleName": {
            "bsonType": "string"
          },
          "lastName": {
            "bsonType": "string"
          },
          "persona": {
            "bsonType": "string"
          },
          "active": {
            "bsonType": "bool"
          },
          "lastLoginTime": {
            "bsonType": "date"
          },
          "LOB": {
            "bsonType": "string"
          }
        },
        "additionalProperties": false
      }
    },
    "validationLevel": "off",
    "validationAction": "warn"
});
```

2.1.2.6 Collection Builds

2.1.2.6.1 Builds Tree Diagram

2.1.2.6.2 Builds Properties

PROPERTY	VALUE
Collection name	Builds
Technical name	
Activated	true
Id	
$ref	
Description	
Database	Photon Insights
Capped	
Time series	
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Off
Validation action	Warn
Encryption metadata	
Additional properties	false
Workload analysis	
[1] Actor	
Description	
Number of documents	
Avg document size (Bytes)	
Read-to-Write ratio	
Keep forever	
Retention (months)	
Write operations	
Read operations	
Comments	Contains one document for each deployment, with an array of build data for the deployment. The _id value of builds documents will match deploymentID values in Deployments documents. Each module document will be linked to many Builds documents, however there is a one-to-one relationship between Builds documents and individual entries in the deployments array of each module document. It's not clear from screenshots I've seen, what the data in the Builds documents will be used for as the current version is also embedded in the deployment data.

2.1.2.6.3 Builds Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
_id	string	false			
builds	array	false			
[0]	document	false			
version	string	false			
buildID	numeric	false			
commitID	string	false			
commitTime	date	false			
branchName	string	false			
buildTime	date	false			

2.1.2.6.3.1 Field _id

2.1.2.6.3.1.1 _id Tree Diagram

2.1.2.6.3.1.2 _id properties

PROPERTY	VALUE
Name	_id
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	Modules
Foreign field	deploymentId
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.6.3.2 Field builds

2.1.2.6.3.2.1 builds Tree Diagram
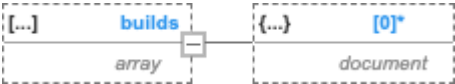
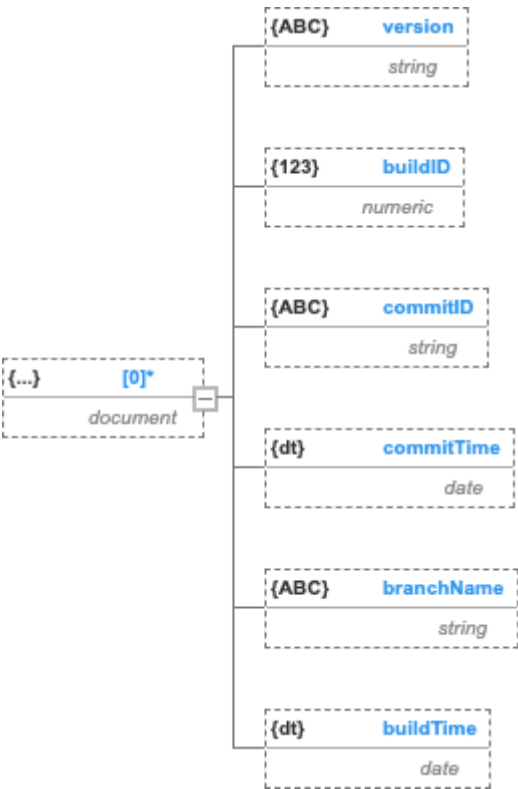### 2.1.2.6.3.2.2 builds Hierarchy

Parent field: **Builds**
Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0]	document	false			

2.1.2.6.3.2.3 builds properties

PROPERTY	VALUE
Name	builds
Technical name	
Activated	true
Id	
Field-level encryption	
Type	array
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Min items	
Max items	
Unique items	
Additional items	true
Quantification	
Comments	

2.1.2.6.3.3 Field [0]

2.1.2.6.3.3.1 [0] Tree Diagram

2.1.2.6.3.3.2 [0] Hierarchy

Parent field: **builds**
Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
version	string	false			
buildID	numeric	false			
commitID	string	false			
commitTime	date	false			
branchName	string	false			
buildTime	date	false			

2.1.2.6.3.3.3 [0] properties

PROPERTY	VALUE
Display name	
Activated	true
Id	
Field-level encryption	
Type	document
Description	
Dependencies	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.2.6.3.4 Field version

2.1.2.6.3.4.1 version Tree Diagram

{ABC}   version
           string

2.1.2.6.3.4.2 version properties

PROPERTY	VALUE
Name	version
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.6.3.5 Field buildID

2.1.2.6.3.5.1 buildID Tree Diagram

{123} **buildID**
numeric

2.1.2.6.3.5.2 buildID properties

PROPERTY	VALUE
Name	buildID
Technical name	
Activated	true
Id	
Field-level encryption	
Type	numeric
Subtype	
Description	
Dependencies	
Required	
Primary key	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Unit	
Min value	
Excl min	
Max value	
Excl max	
Multiple of	
Divisible by	
Enum	
Faker function	
Sample	
Comments	

2.1.2.6.3.6 Field commitID

2.1.2.6.3.6.1 commitID Tree Diagram

{ABC} commitID
string

2.1.2.6.3.6.2 commitID properties

PROPERTY	VALUE
Name	commitID
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.6.3.7 Field commitTime

2.1.2.6.3.7.1 commitTime Tree Diagram

{dt}   commitTime
       date

2.1.2.6.3.7.2 commitTime properties

PROPERTY	VALUE
Name	commitTime
Technical name	
Activated	true
Id	
Field-level encryption	
Type	date
Description	
Dependencies	
Required	
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Now	
Faker function	
Sample	
Comments	

2.1.2.6.3.8 Field branchName

2.1.2.6.3.8.1 branchName Tree Diagram

{ABC}   branchName
string

2.1.2.6.3.8.2 branchName properties

PROPERTY	VALUE
Name	branchName
Technical name	
Activated	true
Id	
Field-level encryption	
Type	string
Description	
Format	
Pattern	
Min length	
Max length	
Default	
Enum	
Required	
Primary key	
Dependencies	
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Faker function	
Sample	
Comments	

2.1.2.6.3.9 Field buildTime

2.1.2.6.3.9.1 buildTime Tree Diagram

2.1.2.6.3.9.2 buildTime properties

PROPERTY	VALUE
Name	buildTime
Technical name	
Activated	true
Id	
Field-level encryption	
Type	date
Description	
Dependencies	
Required	
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Relationship name	
Cardinality	
Default	
Now	
Faker function	
Sample	
Comments	

2.1.2.6.4 Builds JSON Schema

```json
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "type": "object",
    "title": "Builds",
    "properties": {
        "_id": {
            "type": "string"
        },
        "builds": {
            "type": "array",
            "additionalItems": true,
            "items": {
                "type": "object",
                "properties": {
                    "version": {
                        "type": "string"
                    },
                    "buildID": {
                        "type": "number"
                    },
                    "commitID": {
                        "type": "string"
                    },
                    "commitTime": {
                        "type": "string",
                        "format": "date"
                    },
                    "branchName": {
                        "type": "string"
                    },
                    "buildTime": {
                        "type": "string",
                        "format": "date"
                    }
                },
                "additionalProperties": false
            }
        }
    },
    "additionalProperties": false
}
```

2.1.2.6.5 Builds JSON data

```json
{
    "_id": "Lorem",
    "builds": [
        {
            "version": "Lorem",
            "buildID": 57,
            "commitID": "Lorem",
            "commitTime": ISODate("2016-04-08T15:06:21.595Z"),
            "branchName": "Lorem",
            "buildTime": ISODate("2016-04-08T15:06:21.595Z")
        }
    ]
}
```

2.1.2.6.6 Builds Target Script
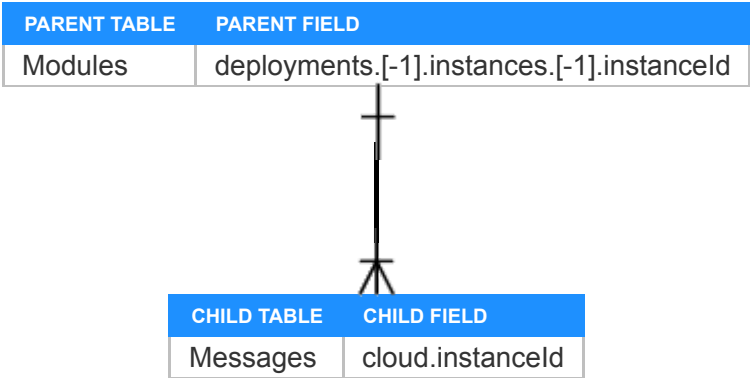
```
use Photon Insights;

db.createCollection("Builds", {
    "capped": false,
    "validator": {
        "$jsonSchema": {
            "bsonType": "object",
            "title": "Builds",
            "properties": {
                "_id": {
                    "bsonType": "string"
                },
                "builds": {
                    "bsonType": "array",
                    "additionalItems": true,
                    "items": {
                        "bsonType": "object",
                        "properties": {
                            "version": {
                                "bsonType": "string"
                            },
                            "buildID": {
                                "bsonType": "number"
                            },
                            "commitID": {
                                "bsonType": "string"
                            },
                            "commitTime": {
                                "bsonType": "date"
                            },
                            "branchName": {
                                "bsonType": "string"
                            },
                            "buildTime": {
                                "bsonType": "date"
                            }
                        },
                        "additionalProperties": false
                    }
                }
            },
            "additionalProperties": false
        }
    },
    "validationLevel": "off",
    "validationAction": "warn"
});
```

3. RELATIONSHIPS

3.1 Relationship Instances_Messages
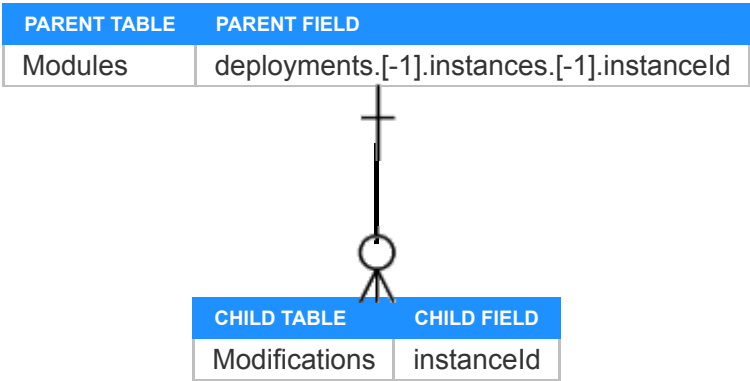
3.1.1 Instances_Messages Diagram

PARENT TABLE	PARENT FIELD
Modules	deployments.[-1].instances.[-1].instanceId

CHILD TABLE	CHILD FIELD
Messages	cloud.instanceId

3.1.2 Instances_Messages Properties

PROPERTY	VALUE
Name	Instances_Messages
Description	
Parent Collection	Modules
Parent field	instanceId
Parent Cardinality	1
Child Collection	Messages
Child field	instanceId
Child Cardinality	1..n
Comments	Cardinality is one to many between modules and messages. However, each message is tied to one specific instance.

3.2 Relationship Instances_ConfigChanges

3.2.1 Instances_ConfigChanges Diagram

PARENT TABLE	PARENT FIELD
Modules	deployments.[-1].instances.[-1].instanceId

CHILD TABLE	CHILD FIELD
Modifications	instanceId

3.2.2 Instances_ConfigChanges Properties

PROPERTY	VALUE
Name	Instances_ConfigChanges
Description	
Parent Collection	Modules
Parent field	instanceId
Parent Cardinality	1
Child Collection	Modifications
Child field	instanceId
Child Cardinality	0..n
Comments	

3.3 Relationship Users_Deployments

3.3.1 Users_Deployments Diagram

PARENT TABLE	PARENT FIELD
Users	_id

CHILD TABLE	CHILD FIELD
Modules	payload.subscribedUsers.[-1]
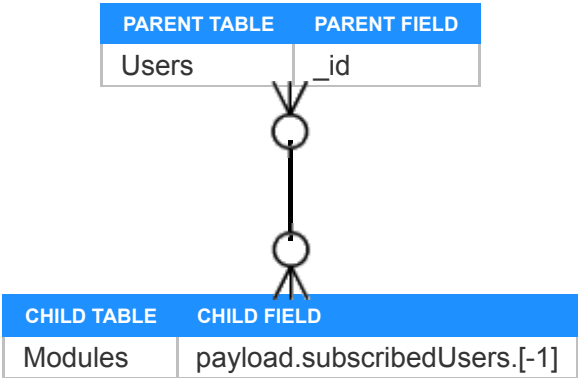
3.3.2 Users_Deployments Properties

PROPERTY	VALUE
Name	Users_Deployments
Description	
Parent Collection	Users
Parent field	_id
Parent Cardinality	0..n
Child Collection	Modules
Child field	
Child Cardinality	0..n
Comments	Subscribed user SID's will be listed in the an array within the module documents' payload.

3.4 Relationship Deployments_Messages
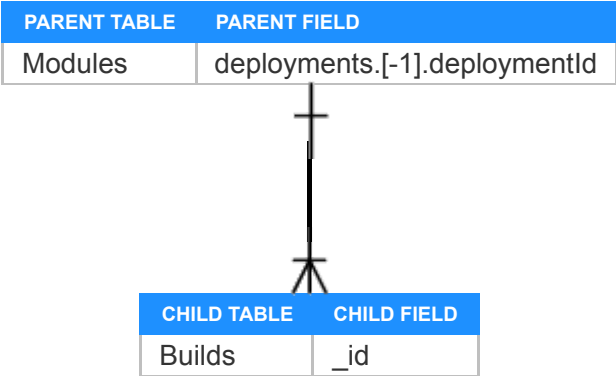
3.4.1 Deployments_Messages Diagram

PARENT TABLE	PARENT FIELD
Modules	deployments.[-1].deploymentId

CHILD TABLE	CHILD FIELD
Messages	cloud.appName
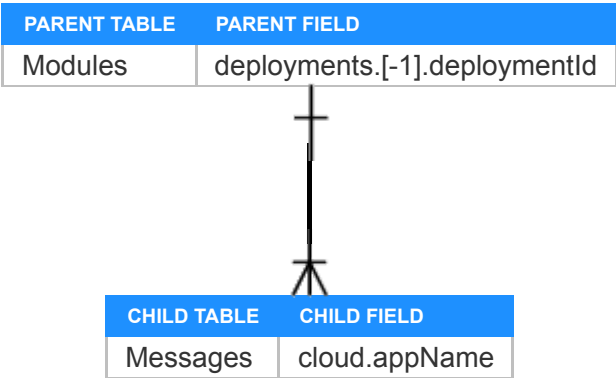
3.4.2 Deployments_Messages Properties

PROPERTY	VALUE
Name	Deployments_Messages
Description	The relationship is one-to-many from modules to messages, but there is a one-to-one relationship between a deployment and its baseline message (match on deploymentId AND baseLine == true)
Parent Collection	Modules
Parent field	deploymentId
Parent Cardinality	1
Child Collection	Messages
Child field	appName
Child Cardinality	1..n
Comments	

3.5 Relationship Modules_Builds

3.5.1 Modules_Builds Diagram

PARENT TABLE	PARENT FIELD
Modules	deployments.[-1].deploymentId

CHILD TABLE	CHILD FIELD
Builds	_id

3.5.2 Modules_Builds Properties

PROPERTY	VALUE
Name	Modules_Builds
Description	
Parent Collection	Modules
Parent field	deploymentId
Parent Cardinality	1
Child Collection	Builds
Child field	_id
Child Cardinality	1..n
Comments	

3.6 Relationship Anomalies_Rules

3.6.1 Anomalies_Rules Diagram

PARENT TABLE	PARENT FIELD
Modules	deployments.[-1].anomalies.[-1].ruleId

CHILD TABLE	CHILD FIELD
Rules	_id
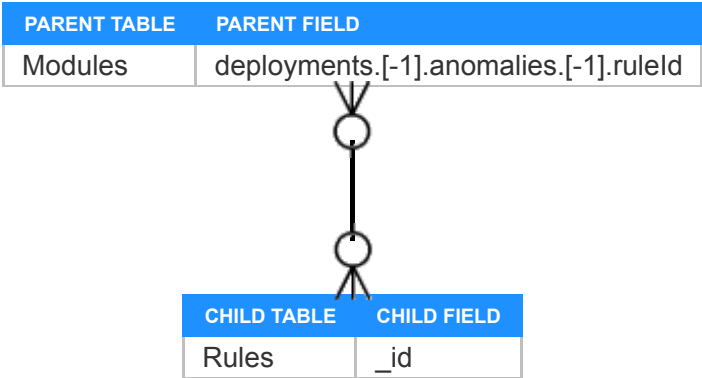
3.6.2 Anomalies_Rules Properties

PROPERTY	VALUE
Name	Anomalies_Rules
Description	
Parent Collection	Modules
Parent field	ruleId
Parent Cardinality	0..n
Child Collection	Rules
Child field	_id
Child Cardinality	0..n
Comments	There's a many to many relationship between module documents and rule documents, however the relationship is many to one from individual anomalies within module documents to rules