# Schema Types

**Table of Contents**

* [Query](#query)
  + [Mutation](#mutation)
  + [Objects](#objects)
    - [Action](#action)
    - [Activity](#activity)
    - [AgentRelationship](#agentrelationship)
    - [AgentRelationshipResponse](#agentrelationshipresponse)
    - [AgentRelationshipRole](#agentrelationshiprole)
    - [AgentRelationshipRoleResponse](#agentrelationshiproleresponse)
    - [AgentsPage](#agentspage)
    - [Agreement](#agreement)
    - [AgreementResponse](#agreementresponse)
    - [Appreciation](#appreciation)
    - [AppreciationResponse](#appreciationresponse)
    - [CategoriesPage](#categoriespage)
    - [Category](#category)
    - [Character](#character)
    - [Claim](#claim)
    - [ClaimResponse](#claimresponse)
    - [Commitment](#commitment)
    - [CommitmentResponse](#commitmentresponse)
    - [Duration](#duration)
    - [EconomicEvent](#economicevent)
    - [EconomicEventPage](#economiceventpage)
    - [EconomicEventResponse](#economiceventresponse)
    - [EconomicResource](#economicresource)
    - [EconomicResourcePage](#economicresourcepage)
    - [EconomicResourceResponse](#economicresourceresponse)
    - [Follow](#follow)
    - [Fulfillment](#fulfillment)
    - [FulfillmentResponse](#fulfillmentresponse)
    - [Intent](#intent)
    - [IntentResponse](#intentresponse)
    - [IntentsPage](#intentspage)
    - [LoginResponse](#loginresponse)
    - [Me](#me)
    - [Measure](#measure)
    - [MeasuresPage](#measurespage)
    - [ObservablePhenomenon](#observablephenomenon)
    - [ObservablePhenomenonPage](#observablephenomenonpage)
    - [ObservableProperty](#observableproperty)
    - [ObservablePropertyPage](#observablepropertypage)
    - [Observation](#observation)
    - [ObservationPage](#observationpage)
    - [Organization](#organization)
    - [OrganizationResponse](#organizationresponse)
    - [PageInfo](#pageinfo)
    - [Person](#person)
    - [PersonResponse](#personresponse)
    - [Plan](#plan)
    - [PlanResponse](#planresponse)
    - [Post](#post)
    - [PostContent](#postcontent)
    - [Process](#process)
    - [ProcessPage](#processpage)
    - [ProcessResponse](#processresponse)
    - [ProcessSpecification](#processspecification)
    - [ProcessSpecificationResponse](#processspecificationresponse)
    - [ProductBatch](#productbatch)
    - [ProductBatchResponse](#productbatchresponse)
    - [Profile](#profile)
    - [Proposal](#proposal)
    - [ProposalResponse](#proposalresponse)
    - [ProposalsPage](#proposalspage)
    - [ProposedIntent](#proposedintent)
    - [ProposedIntentResponse](#proposedintentresponse)
    - [ProposedTo](#proposedto)
    - [ProposedToResponse](#proposedtoresponse)
    - [RecipeExchange](#recipeexchange)
    - [RecipeExchangeResponse](#recipeexchangeresponse)
    - [RecipeFlow](#recipeflow)
    - [RecipeFlowResponse](#recipeflowresponse)
    - [RecipeProcess](#recipeprocess)
    - [RecipeProcessResponse](#recipeprocessresponse)
    - [RecipeResource](#reciperesource)
    - [RecipeResourceResponse](#reciperesourceresponse)
    - [Replied](#replied)
    - [ResourceSpecification](#resourcespecification)
    - [ResourceSpecificationPage](#resourcespecificationpage)
    - [ResourceSpecificationResponse](#resourcespecificationresponse)
    - [RootSubscriptionType](#rootsubscriptiontype)
    - [Satisfaction](#satisfaction)
    - [SatisfactionResponse](#satisfactionresponse)
    - [Scenario](#scenario)
    - [ScenarioDefinition](#scenariodefinition)
    - [ScenarioDefinitionResponse](#scenariodefinitionresponse)
    - [ScenarioResponse](#scenarioresponse)
    - [Settlement](#settlement)
    - [SettlementResponse](#settlementresponse)
    - [SpatialThing](#spatialthing)
    - [SpatialThingResponse](#spatialthingresponse)
    - [SpatialThingsPage](#spatialthingspage)
    - [Tag](#tag)
    - [Unit](#unit)
    - [UnitResponse](#unitresponse)
    - [UnitsPage](#unitspage)
    - [User](#user)
    - [ValueCalculation](#valuecalculation)
    - [ValueCalculationPage](#valuecalculationpage)
    - [ValueCalculationResponse](#valuecalculationresponse)
    - [Verb](#verb)
  + [Inputs](#inputs)
    - [ActivityFilters](#activityfilters)
    - [AgentCreateParams](#agentcreateparams)
    - [AgentRelationshipCreateParams](#agentrelationshipcreateparams)
    - [AgentRelationshipRoleCreateParams](#agentrelationshiprolecreateparams)
    - [AgentRelationshipRoleUpdateParams](#agentrelationshiproleupdateparams)
    - [AgentRelationshipUpdateParams](#agentrelationshipupdateparams)
    - [AgentUpdateParams](#agentupdateparams)
    - [AgreementCreateParams](#agreementcreateparams)
    - [AgreementUpdateParams](#agreementupdateparams)
    - [AppreciationCreateParams](#appreciationcreateparams)
    - [AppreciationUpdateParams](#appreciationupdateparams)
    - [CategoryInput](#categoryinput)
    - [CharacterFilters](#characterfilters)
    - [CharacterInput](#characterinput)
    - [ClaimCreateParams](#claimcreateparams)
    - [ClaimUpdateParams](#claimupdateparams)
    - [CommitmentCreateParams](#commitmentcreateparams)
    - [CommitmentUpdateParams](#commitmentupdateparams)
    - [EconomicEventCreateParams](#economiceventcreateparams)
    - [EconomicEventUpdateParams](#economiceventupdateparams)
    - [EconomicResourceCreateParams](#economicresourcecreateparams)
    - [EconomicResourceUpdateParams](#economicresourceupdateparams)
    - [FeedFilters](#feedfilters)
    - [FulfillmentCreateParams](#fulfillmentcreateparams)
    - [FulfillmentUpdateParams](#fulfillmentupdateparams)
    - [GeolocationDistance](#geolocationdistance)
    - [GeolocationFilters](#geolocationfilters)
    - [GeolocationPoint](#geolocationpoint)
    - [IDuration](#iduration)
    - [IMeasure](#imeasure)
    - [IntentCreateParams](#intentcreateparams)
    - [IntentSearchParams](#intentsearchparams)
    - [IntentUpdateParams](#intentupdateparams)
    - [ObservablePhenomenonInputParams](#observablephenomenoninputparams)
    - [ObservablePropertyInputParams](#observablepropertyinputparams)
    - [ObservationInputParams](#observationinputparams)
    - [Paginate](#paginate)
    - [PlanCreateParams](#plancreateparams)
    - [PlanUpdateParams](#planupdateparams)
    - [PostContentInput](#postcontentinput)
    - [PostFilters](#postfilters)
    - [ProcessCreateParams](#processcreateparams)
    - [ProcessSpecificationCreateParams](#processspecificationcreateparams)
    - [ProcessSpecificationUpdateParams](#processspecificationupdateparams)
    - [ProcessUpdateParams](#processupdateparams)
    - [ProductBatchCreateParams](#productbatchcreateparams)
    - [ProductBatchUpdateParams](#productbatchupdateparams)
    - [ProfileInput](#profileinput)
    - [ProposalCreateParams](#proposalcreateparams)
    - [ProposalUpdateParams](#proposalupdateparams)
    - [RecipeExchangeCreateParams](#recipeexchangecreateparams)
    - [RecipeExchangeUpdateParams](#recipeexchangeupdateparams)
    - [RecipeFlowCreateParams](#recipeflowcreateparams)
    - [RecipeFlowUpdateParams](#recipeflowupdateparams)
    - [RecipeProcessCreateParams](#recipeprocesscreateparams)
    - [RecipeProcessUpdateParams](#recipeprocessupdateparams)
    - [RecipeResourceCreateParams](#reciperesourcecreateparams)
    - [RecipeResourceUpdateParams](#reciperesourceupdateparams)
    - [ResourceSpecificationCreateParams](#resourcespecificationcreateparams)
    - [ResourceSpecificationUpdateParams](#resourcespecificationupdateparams)
    - [SatisfactionCreateParams](#satisfactioncreateparams)
    - [SatisfactionUpdateParams](#satisfactionupdateparams)
    - [ScenarioCreateParams](#scenariocreateparams)
    - [ScenarioDefinitionCreateParams](#scenariodefinitioncreateparams)
    - [ScenarioDefinitionUpdateParams](#scenariodefinitionupdateparams)
    - [ScenarioUpdateParams](#scenarioupdateparams)
    - [SettlementCreateParams](#settlementcreateparams)
    - [SettlementUpdateParams](#settlementupdateparams)
    - [SpatialThingCreateParams](#spatialthingcreateparams)
    - [SpatialThingUpdateParams](#spatialthingupdateparams)
    - [UnitCreateParams](#unitcreateparams)
    - [UnitUpdateParams](#unitupdateparams)
    - [ValueCalculationCreateParams](#valuecalculationcreateparams)
    - [ValueCalculationUpdateParams](#valuecalculationupdateparams)
    - [agentCommitmentSearchParams](#agentcommitmentsearchparams)
    - [agentEventSearchParams](#agenteventsearchparams)
    - [agentPlanSearchParams](#agentplansearchparams)
    - [agentProcessSearchParams](#agentprocesssearchparams)
    - [agentResourceSearchParams](#agentresourcesearchparams)
    - [planProcessSearchParams](#planprocesssearchparams)
  + [Enums](#enums)
    - [AgentType](#agenttype)
    - [TimeUnit](#timeunit)
  + [Scalars](#scalars)
    - [Boolean](#boolean)
    - [Cursor](#cursor)
    - [DateTime](#datetime)
    - [Float](#float)
    - [ID](#id)
    - [Int](#int)
    - [Json](#json)
    - [String](#string)
    - [URI](#uri)
  + [Interfaces](#interfaces)
    - [Agent](#agent)
  + [Unions](#unions)
    - [AccountingScope](#accountingscope)
    - [AnyCharacter](#anycharacter)
    - [AnyContext](#anycontext)
    - [EventOrCommitment](#eventorcommitment)
    - [ObservableObject](#observableobject)
    - [ObservableResult](#observableresult)
    - [Observer](#observer)
    - [ProductionFlowItem](#productionflowitem)

## Query (RootQueryType)

Field

Argument

Type

Description

**action**

[Action](#action)

id

[ID](#id)

**actions**

[[Action](#action)!]

**activity**

[Activity](#activity)

Get an activity

filter

[ActivityFilters](#activityfilters)

**agent**

[Agent](#agent)

Find an agent (person or organization) by their ID

id

[ID](#id)

**agentRelationship**

[AgentRelationship](#agentrelationship)

Retrieve details of an agent relationship by its ID

id

[ID](#id)

**agentRelationshipRole**

[AgentRelationshipRole](#agentrelationshiprole)

Retrieve details of an agent relationship role by its ID

id

[ID](#id)

**agentRelationshipRoles**

[[AgentRelationshipRole](#agentrelationshiprole)!]

Retrieve all possible kinds of associations that agents may have with one another in this collaboration space

limit

[Int](#int)

start

[ID](#id)

**agentRelationships**

[[AgentRelationship](#agentrelationship)!]

Retrieve details of all the relationships between all agents registered in this collaboration space

limit

[Int](#int)

start

[ID](#id)

**agents**

[[Agent](#agent)!]

Loads all agents publicly registered within this collaboration space

limit

[Int](#int)

start

[ID](#id)

**agreement**

[Agreement](#agreement)

id

[ID](#id)

**agreements**

[[Agreement](#agreement)!]

limit

[Int](#int)

start

[ID](#id)

**categories**

[CategoriesPage](#categoriespage)!

Get list of categories we know about

after

[[Cursor](#cursor)!]

before

[[Cursor](#cursor)!]

limit

[Int](#int)

**category**

[Category](#category)

Get a category by ID

categoryId

[ID](#id)

**claim**

[Claim](#claim)

id

[ID](#id)

**claims**

[[Claim](#claim)!]

limit

[Int](#int)

start

[ID](#id)

**commitment**

[Commitment](#commitment)

id

[ID](#id)

**commitments**

[[Commitment](#commitment)!]

filter

[agentCommitmentSearchParams](#agentcommitmentsearchparams)

limit

[Int](#int)

start

[ID](#id)

**economicEvent**

[EconomicEvent](#economicevent)

id

[ID](#id)

**economicEvents**

[[EconomicEvent](#economicevent)!]

limit

[Int](#int)

start

[ID](#id)

**economicEventsFiltered**

[[EconomicEvent](#economicevent)!]

action

[ID](#id)

endDate

[String](#string)

providerId

[ID](#id)

receiverId

[ID](#id)

resourceClassifiedAs

[[URI](#uri)!]

startDate

[String](#string)

**economicEventsPages**

[EconomicEventPage](#economiceventpage)!

Get paginated list of economic events

after

[[Cursor](#cursor)!]

before

[[Cursor](#cursor)!]

limit

[Int](#int)

**economicResource**

[EconomicResource](#economicresource)

id

[ID](#id)

**economicResources**

[[EconomicResource](#economicresource)!]

limit

[Int](#int)

start

[ID](#id)

**economicResourcesFiltered**

[[EconomicResource](#economicresource)]

TEMPORARY - get filtered but non-paginated list of resources

agent

[[ID](#id)]

currentLocation

[[ID](#id)]

geolocation

[GeolocationFilters](#geolocationfilters)

inScopeOf

[[ID](#id)]

state

[[ID](#id)]

tagIds

[[ID](#id)]

trackingIdentifier

[[String](#string)]

**economicResourcesPages**

[EconomicResourcePage](#economicresourcepage)!

Get paginated list of economic resources

after

[[Cursor](#cursor)!]

before

[[Cursor](#cursor)!]

limit

[Int](#int)

**feed**

[[Activity](#activity)]

Get activities in a feed

filter

[FeedFilters](#feedfilters)

paginate

[Paginate](#paginate)

**fulfillment**

[Fulfillment](#fulfillment)

id

[ID](#id)

**fulfillments**

[[Fulfillment](#fulfillment)!]

limit

[Int](#int)

start

[ID](#id)

**intent**

[Intent](#intent)

id

[ID](#id)

**intents**

[[Intent](#intent)!]

filter

[IntentSearchParams](#intentsearchparams)

limit

[Int](#int)

start

[ID](#id)

**intentsPages**

[IntentsPage](#intentspage)!

Get paginated list of intents

after

[[Cursor](#cursor)!]

before

[[Cursor](#cursor)!]

limit

[Int](#int)

**me**

[Me](#me)

Get information about and for the current user

**measure**

[Measure](#measure)

id

[ID](#id)

**measures**

[[Measure](#measure)!]

limit

[Int](#int)

start

[ID](#id)

**measuresPages**

[MeasuresPage](#measurespage)!

after

[[Cursor](#cursor)]

before

[[Cursor](#cursor)]

limit

[Int](#int)

**myAgent**

[Agent](#agent)

Loads details of the currently authenticated REA agent

**needsPages**

[IntentsPage](#intentspage)!

Get paginated list of active needs (intents with no provider)

after

[[Cursor](#cursor)!]

before

[[Cursor](#cursor)!]

limit

[Int](#int)

**observablePhenomenon**

[ObservablePhenomenon](#observablephenomenon)

id

[ID](#id)

**observablePhenomenonPages**

[ObservablePhenomenonPage](#observablephenomenonpage)!

Get paginated list of observable phenomenon

after

[[Cursor](#cursor)!]

before

[[Cursor](#cursor)!]

limit

[Int](#int)

**observablePhenomenons**

[[ObservablePhenomenon](#observablephenomenon)!]

limit

[Int](#int)

start

[ID](#id)

**observableProperties**

[[ObservableProperty](#observableproperty)!]

limit

[Int](#int)

start

[ID](#id)

**observablePropertiesPages**

[ObservablePropertyPage](#observablepropertypage)!

Get paginated list of observable properties

after

[[Cursor](#cursor)!]

before

[[Cursor](#cursor)!]

limit

[Int](#int)

**observableProperty**

[ObservableProperty](#observableproperty)

id

[ID](#id)

**observation**

[Observation](#observation)

id

[ID](#id)

**observations**

[[Observation](#observation)!]

limit

[Int](#int)

start

[ID](#id)

**observationsPages**

[ObservationPage](#observationpage)!

Get paginated list of observations

after

[[Cursor](#cursor)!]

agent

[[ID](#id)!]

before

[[Cursor](#cursor)!]

hasFeatureOfInterest

[[ID](#id)!]

limit

[Int](#int)

madeBySensor

[[ID](#id)!]

observedDuring

[[ID](#id)!]

observedProperty

[[ID](#id)!]

provider

[[ID](#id)!]

**offersPages**

[IntentsPage](#intentspage)!

Get paginated list of active offers (intents with no receiver)

after

[[Cursor](#cursor)!]

before

[[Cursor](#cursor)!]

limit

[Int](#int)

**organization**

[Organization](#organization)

Find an organization (group) agent by its ID

id

[ID](#id)

**organizations**

[[Organization](#organization)!]

Loads all organizations publicly registered within this collaboration space

limit

[Int](#int)

start

[ID](#id)

**organizationsPages**

[AgentsPage](#agentspage)!

Get paginated list of organizations

after

[[Cursor](#cursor)!]

before

[[Cursor](#cursor)!]

limit

[Int](#int)

**people**

[[Person](#person)!]

Loads all people who have publicly registered with this collaboration space.

limit

[Int](#int)

start

[ID](#id)

**peoplePages**

[AgentsPage](#agentspage)!

Get paginated list of people

after

[[Cursor](#cursor)!]

before

[[Cursor](#cursor)!]

limit

[Int](#int)

**person**

[Person](#person)

Find a person by their ID

id

[ID](#id)

**plan**

[Plan](#plan)

id

[ID](#id)

**plans**

[[Plan](#plan)!]

limit

[Int](#int)

start

[ID](#id)

**post**

[Post](#post)

Get a post

filter

[PostFilters](#postfilters)

**posts**

[[Post](#post)]

Get all posts

**process**

[Process](#process)

id

[ID](#id)

**processSpecification**

[ProcessSpecification](#processspecification)

id

[ID](#id)

**processSpecifications**

[[ProcessSpecification](#processspecification)!]

limit

[Int](#int)

start

[ID](#id)

**processes**

[[Process](#process)!]

limit

[Int](#int)

start

[ID](#id)

**processesPages**

[ProcessPage](#processpage)!

Get paginated list of processes

after

[[Cursor](#cursor)!]

before

[[Cursor](#cursor)!]

limit

[Int](#int)

**productBatch**

[ProductBatch](#productbatch)

id

[ID](#id)

**productBatches**

[[ProductBatch](#productbatch)!]

limit

[Int](#int)

start

[ID](#id)

**proposal**

[Proposal](#proposal)

id

[ID](#id)

**proposals**

[[Proposal](#proposal)!]

limit

[Int](#int)

start

[ID](#id)

**proposalsFiltered**

[[Proposal](#proposal)]

TEMPORARY - get filtered but non-paginated list of proposals

agent

[[ID](#id)]

atLocation

[[ID](#id)]

geolocation

[GeolocationFilters](#geolocationfilters)

inScopeOf

[[ID](#id)]

**proposalsPages**

[ProposalsPage](#proposalspage)!

Get paginated list of proposals

after

[[Cursor](#cursor)!]

before

[[Cursor](#cursor)!]

limit

[Int](#int)

**recipeExchange**

[RecipeExchange](#recipeexchange)

id

[ID](#id)

**recipeExchanges**

[[RecipeExchange](#recipeexchange)!]

limit

[Int](#int)

start

[ID](#id)

**recipeFlow**

[RecipeFlow](#recipeflow)

id

[ID](#id)

**recipeFlows**

[[RecipeFlow](#recipeflow)!]

limit

[Int](#int)

start

[ID](#id)

**recipeProcess**

[RecipeProcess](#recipeprocess)

id

[ID](#id)

**recipeProcesses**

[[RecipeProcess](#recipeprocess)!]

limit

[Int](#int)

start

[ID](#id)

**recipeResource**

[RecipeResource](#reciperesource)

id

[ID](#id)

**recipeResources**

[[RecipeResource](#reciperesource)!]

limit

[Int](#int)

start

[ID](#id)

**resourceSpecification**

[ResourceSpecification](#resourcespecification)

id

[ID](#id)

**resourceSpecifications**

[[ResourceSpecification](#resourcespecification)!]

limit

[Int](#int)

start

[ID](#id)

**resourceSpecificationsPages**

[ResourceSpecificationPage](#resourcespecificationpage)!

Get paginated list of resource specifications

after

[[Cursor](#cursor)!]

before

[[Cursor](#cursor)!]

inScopeOf

[[ID](#id)]

limit

[Int](#int)

tagIds

[[ID](#id)]

**satisfaction**

[Satisfaction](#satisfaction)

id

[ID](#id)

**satisfactions**

[[Satisfaction](#satisfaction)!]

limit

[Int](#int)

start

[ID](#id)

**scenario**

[Scenario](#scenario)

id

[ID](#id)

**scenarioDefinition**

[ScenarioDefinition](#scenariodefinition)

id

[ID](#id)

**scenarioDefinitions**

[[ScenarioDefinition](#scenariodefinition)!]

limit

[Int](#int)

start

[ID](#id)

**scenarios**

[[Scenario](#scenario)!]

limit

[Int](#int)

start

[ID](#id)

**settlement**

[Settlement](#settlement)

id

[ID](#id)

**settlements**

[[Settlement](#settlement)!]

limit

[Int](#int)

start

[ID](#id)

**spatialThing**

[SpatialThing](#spatialthing)

id

[ID](#id)

**spatialThings**

[[SpatialThing](#spatialthing)!]

limit

[Int](#int)

start

[ID](#id)

**spatialThingsPages**

[SpatialThingsPage](#spatialthingspage)!

after

[[Cursor](#cursor)]

before

[[Cursor](#cursor)]

limit

[Int](#int)

**tag**

[Tag](#tag)

Get a tag by ID

id

[ID](#id)

**unit**

[Unit](#unit)

id

[ID](#id)

**units**

[[Unit](#unit)!]

limit

[Int](#int)

start

[ID](#id)

**unitsPages**

[UnitsPage](#unitspage)!

after

[[Cursor](#cursor)]

before

[[Cursor](#cursor)]

limit

[Int](#int)

**user**

[User](#user)

Get a user

filter

[CharacterFilters](#characterfilters)

**valueCalculation**

[ValueCalculation](#valuecalculation)

id

[ID](#id)

**valueCalculationsPages**

[ValueCalculationPage](#valuecalculationpage)!

after

[[Cursor](#cursor)!]

before

[[Cursor](#cursor)!]

limit

[Int](#int)

## Mutation (RootMutationType)

Field

Argument

Type

Description

**addTeamMember**

[String](#string)

Share the current user identity with a team member. This will give them full access to the currently authenticated user identity. Warning: anyone you add will have admin-level access over this user identity, meaning they can post as this user, read private messages, etc.

label

[String](#string)!

What to call this team (eg. Organisation, Team, etc)

usernameOrEmail

[String](#string)!

Who to add (they need to be an existing user on this instance)

**boost**

[Activity](#activity)

id

[String](#string)!

**changePassword**

[Me](#me)

Change account password

oldPassword

[String](#string)!

password

[String](#string)!

passwordConfirmation

[String](#string)!

**confirmEmail**

[Me](#me)

Confirm email address using a token generated upon signup or with request\_confirm\_email and emailed to the user.

token

[String](#string)!

**createAgentRelationship**

[AgentRelationshipResponse](#agentrelationshipresponse)

relationship

[AgentRelationshipCreateParams](#agentrelationshipcreateparams)!

**createAgentRelationshipRole**

[AgentRelationshipRoleResponse](#agentrelationshiproleresponse)

agentRelationshipRole

[AgentRelationshipRoleCreateParams](#agentrelationshiprolecreateparams)

**createAgreement**

[AgreementResponse](#agreementresponse)

agreement

[AgreementCreateParams](#agreementcreateparams)

**createAppreciation**

[AppreciationResponse](#appreciationresponse)

appreciation

[AppreciationCreateParams](#appreciationcreateparams)!

**createCategory**

[Category](#category)

Create a new Category

category

[CategoryInput](#categoryinput)

**createClaim**

[ClaimResponse](#claimresponse)

claim

[ClaimCreateParams](#claimcreateparams)!

**createCommitment**

[CommitmentResponse](#commitmentresponse)

commitment

[CommitmentCreateParams](#commitmentcreateparams)

**createEconomicEvent**

[EconomicEventResponse](#economiceventresponse)

event

[EconomicEventCreateParams](#economiceventcreateparams)!

newInventoriedResource

[EconomicResourceCreateParams](#economicresourcecreateparams)

**createFulfillment**

[FulfillmentResponse](#fulfillmentresponse)

fulfillment

[FulfillmentCreateParams](#fulfillmentcreateparams)!

**createIntent**

[IntentResponse](#intentresponse)

intent

[IntentCreateParams](#intentcreateparams)

**createNeed**

[IntentResponse](#intentresponse)

Creates a new need for the logged in user, will ignore any receiver specified.

intent

[IntentCreateParams](#intentcreateparams)

**createObservablePhenomenon**

[ObservablePhenomenon](#observablephenomenon)

observablePhenomenon

[ObservablePhenomenonInputParams](#observablephenomenoninputparams)!

**createObservableProperty**

[ObservableProperty](#observableproperty)

observableProperty

[ObservablePropertyInputParams](#observablepropertyinputparams)!

**createObservation**

[Observation](#observation)!

observation

[ObservationInputParams](#observationinputparams)!

**createOffer**

[IntentResponse](#intentresponse)

Creates a new offer for the logged in user, will ignore any provider specified.

intent

[IntentCreateParams](#intentcreateparams)

**createOrganization**

[OrganizationResponse](#organizationresponse)

Registers a new organization (group agent) with the collaboration space

organization

[AgentCreateParams](#agentcreateparams)!

**createPerson**

[PersonResponse](#personresponse)

Registers a new (human) person with the collaboration space

person

[AgentCreateParams](#agentcreateparams)!

**createPlan**

[PlanResponse](#planresponse)

plan

[PlanCreateParams](#plancreateparams)!

**createPost**

[Post](#post)

postContent

[PostContentInput](#postcontentinput)!

replyTo

[ID](#id)

toCircles

[[ID](#id)]

**createProcess**

[ProcessResponse](#processresponse)

process

[ProcessCreateParams](#processcreateparams)!

**createProcessSpecification**

[ProcessSpecificationResponse](#processspecificationresponse)

processSpecification

[ProcessSpecificationCreateParams](#processspecificationcreateparams)

**createProductBatch**

[ProductBatchResponse](#productbatchresponse)

productBatch

[ProductBatchCreateParams](#productbatchcreateparams)!

**createProposal**

[ProposalResponse](#proposalresponse)

proposal

[ProposalCreateParams](#proposalcreateparams)

**createRecipeExchange**

[RecipeExchangeResponse](#recipeexchangeresponse)

recipeExchange

[RecipeExchangeCreateParams](#recipeexchangecreateparams)

**createRecipeFlow**

[RecipeFlowResponse](#recipeflowresponse)

recipeFlow

[RecipeFlowCreateParams](#recipeflowcreateparams)

**createRecipeProcess**

[RecipeProcessResponse](#recipeprocessresponse)

recipeProcess

[RecipeProcessCreateParams](#recipeprocesscreateparams)

**createRecipeResource**

[RecipeResourceResponse](#reciperesourceresponse)

recipeResource

[RecipeResourceCreateParams](#reciperesourcecreateparams)

**createResourceSpecification**

[ResourceSpecificationResponse](#resourcespecificationresponse)

resourceSpecification

[ResourceSpecificationCreateParams](#resourcespecificationcreateparams)

**createSatisfaction**

[SatisfactionResponse](#satisfactionresponse)

satisfaction

[SatisfactionCreateParams](#satisfactioncreateparams)

**createScenario**

[ScenarioResponse](#scenarioresponse)

plan

[ScenarioCreateParams](#scenariocreateparams)!

**createScenarioDefinition**

[ScenarioDefinitionResponse](#scenariodefinitionresponse)

plan

[ScenarioDefinitionCreateParams](#scenariodefinitioncreateparams)!

**createSettlement**

[SettlementResponse](#settlementresponse)

settlement

[SettlementCreateParams](#settlementcreateparams)!

**createSpatialThing**

[SpatialThingResponse](#spatialthingresponse)

inScopeOf

[ID](#id)

spatialThing

[SpatialThingCreateParams](#spatialthingcreateparams)!

**createUnit**

[UnitResponse](#unitresponse)

unit

[UnitCreateParams](#unitcreateparams)!

**createUser**

[Me](#me)

Request a new user identity for the authenticated account

character

[CharacterInput](#characterinput)!

profile

[ProfileInput](#profileinput)!

**createValueCalculation**

[ValueCalculationResponse](#valuecalculationresponse)

valueCalculation

[ValueCalculationCreateParams](#valuecalculationcreateparams)!

**delete**

[AnyContext](#anycontext)

Delete more or less anything

contextId

[String](#string)!

**deleteAgentRelationship**

[Boolean](#boolean)

id

[ID](#id)!

**deleteAgentRelationshipRole**

[Boolean](#boolean)

id

[ID](#id)!

**deleteAgreement**

[Boolean](#boolean)

id

[ID](#id)!

**deleteAppreciation**

[Boolean](#boolean)

id

[ID](#id)!

**deleteClaim**

[Boolean](#boolean)

id

[ID](#id)!

**deleteCommitment**

[Boolean](#boolean)

id

[ID](#id)!

**deleteEconomicEvent**

[Boolean](#boolean)

id

[ID](#id)!

**deleteEconomicResource**

[Boolean](#boolean)

id

[ID](#id)!

**deleteFulfillment**

[Boolean](#boolean)

id

[ID](#id)!

**deleteIntent**

[Boolean](#boolean)

id

[ID](#id)!

**deleteObservablePhenomenon**

[Boolean](#boolean)

id

[ID](#id)!

**deleteObservableProperty**

[Boolean](#boolean)

id

[ID](#id)!

**deleteObservation**

[Boolean](#boolean)

id

[ID](#id)!

**deleteOrganization**

[Boolean](#boolean)

Erase record of an organization and thus remove it from the collaboration space

id

[ID](#id)!

**deletePerson**

[Boolean](#boolean)

Erase record of a person and thus remove them from the collaboration space

id

[ID](#id)!

**deletePlan**

[Boolean](#boolean)

id

[ID](#id)!

**deleteProcess**

[Boolean](#boolean)

id

[ID](#id)!

**deleteProcessSpecification**

[Boolean](#boolean)

id

[ID](#id)!

**deleteProductBatch**

[Boolean](#boolean)

id

[ID](#id)!

**deleteProposal**

[Boolean](#boolean)

id

[ID](#id)!

**deleteProposedIntent**

[Boolean](#boolean)

id

[ID](#id)!

**deleteProposedTo**

[Boolean](#boolean)

id

[ID](#id)!

**deleteRecipeExchange**

[Boolean](#boolean)

id

[ID](#id)!

**deleteRecipeFlow**

[Boolean](#boolean)

id

[ID](#id)!

**deleteRecipeProcess**

[Boolean](#boolean)

id

[ID](#id)!

**deleteRecipeResource**

[Boolean](#boolean)

id

[ID](#id)!

**deleteResourceSpecification**

[Boolean](#boolean)

id

[ID](#id)!

**deleteSatisfaction**

[Boolean](#boolean)

id

[ID](#id)!

**deleteScenario**

[Boolean](#boolean)

id

[ID](#id)!

**deleteScenarioDefinition**

[Boolean](#boolean)

id

[ID](#id)!

**deleteSettlement**

[Boolean](#boolean)

id

[ID](#id)!

**deleteSpatialThing**

[Boolean](#boolean)

id

[ID](#id)!

**deleteUnit**

[Boolean](#boolean)

id

[ID](#id)!

**deleteValueCalculation**

[Boolean](#boolean)

id

[ID](#id)!

**flag**

[Activity](#activity)

id

[String](#string)!

**follow**

[Activity](#activity)

id

[String](#string)!

username

[String](#string)!

**like**

[Activity](#activity)

id

[String](#string)!

**login**

[LoginResponse](#loginresponse)

Authenticate an account and/or user

emailOrUsername

[String](#string)!

password

[String](#string)!

**makeTag**

[Tag](#tag)

Create a Tag out of something else. You can also directly use the tag() mutation with a pointer ID instead.

contextId

[String](#string)

**proposeIntent**

[ProposedIntentResponse](#proposedintentresponse)

Include an existing intent as part of a proposal. @param publishedIn the (Proposal) to include the intent in @param publishes the (Intent) to include as part of the proposal

publishedIn

[ID](#id)!

publishes

[ID](#id)!

reciprocal

[Boolean](#boolean)

**proposeTo**

[ProposedToResponse](#proposedtoresponse)

Send a proposal to another agent. @param proposed the (Proposal) to send to an involved agent @param proposedTo the (Agent) to include in the proposal

proposed

[ID](#id)!

proposedTo

[ID](#id)!

**requestConfirmEmail**

[String](#string)

Request a new confirmation email

email

[String](#string)!

**requestResetPassword**

[String](#string)

Request an email to be sent to reset a forgotten password

email

[String](#string)!

**selectUser**

[LoginResponse](#loginresponse)

Switch to a user (among those from the authenticated account)

username

[String](#string)!

**signup**

[String](#string)

Register a new account. Returns the created account\_id

email

[String](#string)!

inviteCode

[String](#string)

password

[String](#string)!

**tag**

[Boolean](#boolean)

Tag a thing (using a Pointer) with one or more Tags (or Categories, or even Pointers to anything that can become tag)

tags

[[String](#string)]!

thing

[String](#string)!

**updateAgentRelationship**

[AgentRelationshipResponse](#agentrelationshipresponse)

relationship

[AgentRelationshipUpdateParams](#agentrelationshipupdateparams)!

**updateAgentRelationshipRole**

[AgentRelationshipRoleResponse](#agentrelationshiproleresponse)

agentRelationshipRole

[AgentRelationshipRoleUpdateParams](#agentrelationshiproleupdateparams)

**updateAgreement**

[AgreementResponse](#agreementresponse)

agreement

[AgreementUpdateParams](#agreementupdateparams)

**updateAppreciation**

[AppreciationResponse](#appreciationresponse)

appreciation

[AppreciationUpdateParams](#appreciationupdateparams)!

**updateCategory**

[Category](#category)

Update a category

category

[CategoryInput](#categoryinput)

categoryId

[ID](#id)

**updateClaim**

[ClaimResponse](#claimresponse)

claim

[ClaimUpdateParams](#claimupdateparams)!

**updateCommitment**

[CommitmentResponse](#commitmentresponse)

commitment

[CommitmentUpdateParams](#commitmentupdateparams)

**updateEconomicEvent**

[EconomicEventResponse](#economiceventresponse)

event

[EconomicEventUpdateParams](#economiceventupdateparams)!

**updateEconomicResource**

[EconomicResourceResponse](#economicresourceresponse)

resource

[EconomicResourceUpdateParams](#economicresourceupdateparams)!

**updateFulfillment**

[FulfillmentResponse](#fulfillmentresponse)

fulfillment

[FulfillmentUpdateParams](#fulfillmentupdateparams)!

**updateIntent**

[IntentResponse](#intentresponse)

intent

[IntentUpdateParams](#intentupdateparams)

**updateObservablePhenomenon**

[ObservablePhenomenon](#observablephenomenon)

observablePhenomenon

[ObservablePhenomenonInputParams](#observablephenomenoninputparams)!

**updateObservableProperty**

[ObservableProperty](#observableproperty)

observableProperty

[ObservablePropertyInputParams](#observablepropertyinputparams)!

**updateObservation**

[Observation](#observation)!

observation

[ObservationInputParams](#observationinputparams)!

**updateOrganization**

[OrganizationResponse](#organizationresponse)

Update organization profile details

organization

[AgentUpdateParams](#agentupdateparams)!

**updatePerson**

[PersonResponse](#personresponse)

Update profile details

person

[AgentUpdateParams](#agentupdateparams)!

**updatePlan**

[PlanResponse](#planresponse)

plan

[PlanUpdateParams](#planupdateparams)!

**updateProcess**

[ProcessResponse](#processresponse)

process

[ProcessUpdateParams](#processupdateparams)!

**updateProcessSpecification**

[ProcessSpecificationResponse](#processspecificationresponse)

processSpecification

[ProcessSpecificationUpdateParams](#processspecificationupdateparams)

**updateProductBatch**

[ProductBatchResponse](#productbatchresponse)

productBatch

[ProductBatchUpdateParams](#productbatchupdateparams)!

**updateProposal**

[ProposalResponse](#proposalresponse)

proposal

[ProposalUpdateParams](#proposalupdateparams)

**updateRecipeExchange**

[RecipeExchangeResponse](#recipeexchangeresponse)

recipeExchange

[RecipeExchangeUpdateParams](#recipeexchangeupdateparams)

**updateRecipeFlow**

[RecipeFlowResponse](#recipeflowresponse)

recipeFlow

[RecipeFlowUpdateParams](#recipeflowupdateparams)

**updateRecipeProcess**

[RecipeProcessResponse](#recipeprocessresponse)

recipeProcess

[RecipeProcessUpdateParams](#recipeprocessupdateparams)

**updateRecipeResource**

[RecipeResourceResponse](#reciperesourceresponse)

recipeResource

[RecipeResourceUpdateParams](#reciperesourceupdateparams)

**updateResourceSpecification**

[ResourceSpecificationResponse](#resourcespecificationresponse)

resourceSpecification

[ResourceSpecificationUpdateParams](#resourcespecificationupdateparams)

**updateSatisfaction**

[SatisfactionResponse](#satisfactionresponse)

satisfaction

[SatisfactionUpdateParams](#satisfactionupdateparams)

**updateScenario**

[ScenarioResponse](#scenarioresponse)

plan

[ScenarioUpdateParams](#scenarioupdateparams)!

**updateScenarioDefinition**

[ScenarioDefinitionResponse](#scenariodefinitionresponse)

plan

[ScenarioDefinitionUpdateParams](#scenariodefinitionupdateparams)!

**updateSettlement**

[SettlementResponse](#settlementresponse)

s0ettlement

[SettlementUpdateParams](#settlementupdateparams)!

**updateSpatialThing**

[SpatialThingResponse](#spatialthingresponse)

spatialThing

[SpatialThingUpdateParams](#spatialthingupdateparams)!

**updateUnit**

[UnitResponse](#unitresponse)

unit

[UnitUpdateParams](#unitupdateparams)!

**updateUser**

[Me](#me)

Edit user profile

profile

[ProfileInput](#profileinput)!

**updateValueCalculation**

[ValueCalculationResponse](#valuecalculationresponse)

valueCalculation

[ValueCalculationUpdateParams](#valuecalculationupdateparams)!

## Objects

### Action

An action verb defining the kind of event, commitment, or intent. It is recommended that the lowercase action verb should be used as the record ID in order that references to Actions elsewhere in the system are easily readable.

Field

Argument

Type

Description

**id**

[ID](#id)!

**inputOutput**

[String](#string)

Denotes if a process input or output, or not related to a process.

**label**

[String](#string)!

A unique verb which defines the action.

**note**

[String](#string)

**onhandEffect**

[String](#string)

The onhand effect of an economic event on a resource, increment, decrement, no effect, or decrement resource and increment ‘to’ resource.

**pairsWith**

[String](#string)

The action that should be included on the other direction of the process, for example accept with modify.

**resourceEffect**

[String](#string)!

The accounting effect of an economic event on a resource, increment, decrement, no effect, or decrement resource and increment ‘to’ resource.

### Activity

Field

Argument

Type

Description

**directReplies**

[[Replied](#replied)]

paginate

[Paginate](#paginate)

**id**

[ID](#id)

**object**

[AnyContext](#anycontext)

**objectId**

[String](#string)

**subject**

[AnyCharacter](#anycharacter)

**subjectId**

[String](#string)

**verb**

[Verb](#verb)

### AgentRelationship

The role of an economic relationship that exists between 2 agents, such as member, trading partner.

Field

Argument

Type

Description

**id**

[ID](#id)!

**inScopeOf**

[[AccountingScope](#accountingscope)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**note**

[String](#string)

A textual description or comment.

**object**

[Agent](#agent)!

The object of a relationship between 2 agents. For example, if Mary is a member of a group, then the group is the object.

**relationship**

[AgentRelationshipRole](#agentrelationshiprole)!

A kind of relationship that exists between 2 agents.

**subject**

[Agent](#agent)!

The subject of a relationship between 2 agents. For example, if Mary is a member of a group, then Mary is the subject.

### AgentRelationshipResponse

Field

Argument

Type

Description

**agentRelationship**

[AgentRelationship](#agentrelationship)!

### AgentRelationshipRole

A relationship role defining the kind of association one agent can have with another.

Field

Argument

Type

Description

**id**

[ID](#id)!

**inverseRoleLabel**

[String](#string)

The human readable name of the role, from the object to the subject.

**note**

[String](#string)

A textual description or comment.

**roleLabel**

[String](#string)!

The human readable name of the role, from the subject to the object.

### AgentRelationshipRoleResponse

Field

Argument

Type

Description

**agentRelationshipRole**

[AgentRelationshipRole](#agentrelationshiprole)

### AgentsPage

A page of agents

Field

Argument

Type

Description

**edges**

[[Agent](#agent)!]!

**pageInfo**

[PageInfo](#pageinfo)!

**totalCount**

[Int](#int)!

### Agreement

Any type of agreement among economic agents.

Field

Argument

Type

Description

**commitments**

[[Commitment](#commitment)!]

**created**

[DateTime](#datetime)

The date and time the agreement was created.

**economicEvents**

[[EconomicEvent](#economicevent)!]

**id**

[ID](#id)!

**involvedAgents**

[[Agent](#agent)!]

**name**

[String](#string)

An informal or formal textual identifier for an agreement. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

### AgreementResponse

Field

Argument

Type

Description

**agreement**

[Agreement](#agreement)

### Appreciation

A way to tie an economic event that is given in loose fulfilment for another economic event, without commitments or expectations. Supports the gift economy.

Field

Argument

Type

Description

**appreciationOf**

[EconomicEvent](#economicevent)!

The economic event this appreciation has been given in acknowledgement of.

**appreciationWith**

[EconomicEvent](#economicevent)!

The economic event provided as a gift in this appreciation.

**id**

[ID](#id)!

**note**

[String](#string)

A textual description or comment.

### AppreciationResponse

Field

Argument

Type

Description

**appreciation**

[Appreciation](#appreciation)

### CategoriesPage

Field

Argument

Type

Description

**edges**

[[Category](#category)!]!

**pageInfo**

[PageInfo](#pageinfo)!

**totalCount**

[Int](#int)!

### Category

A category (eg. tag in a taxonomy)

Field

Argument

Type

Description

**caretaker**

[AnyContext](#anycontext)

The caretaker of this category, if any

**extraInfo**

[Json](#json)

A JSON document containing more info beyond the default fields

**facet**

[String](#string)

**id**

[ID](#id)

The numeric primary key of the category

**name**

[String](#string)

**parentCategory**

[Category](#category)

The parent category (in a tree-based taxonomy)

**parentCategoryId**

[String](#string)

**prefix**

[String](#string)

**subCategories**

[[CategoriesPage](#categoriespage)]

List of child categories (in a tree-based taxonomy)

**summary**

[String](#string)

### Character

Field

Argument

Type

Description

**username**

[String](#string)

### Claim

A claim for a future economic event(s) in reciprocity for an economic event that already occurred. For example, a claim for payment for goods received.

Field

Argument

Type

Description

**action**

[Action](#action)!

Relates a claim to a verb, such as consume, produce, work, improve, etc.

**agreedIn**

[URI](#uri)

Reference to an agreement between agents which specifies the rules or policies or calculations which govern this claim.

**calculatedUsing**

[ValueCalculation](#valuecalculation)

Specifies if a calculation will be applied to this claim when an economic event is logged.

**created**

[DateTime](#datetime)

The data on which the claim was made.

**due**

[DateTime](#datetime)

The time the claim is expected to be settled.

**effortQuantity**

[Measure](#measure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**finished**

[Boolean](#boolean)

The claim is complete or not. This is irrespective of if the original goal has been met, and indicates that no more will be done.

**id**

[ID](#id)!

**inScopeOf**

[[AccountingScope](#accountingscope)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**note**

[String](#string)

A textual description or comment.

**provider**

[Agent](#agent)!

The economic agent from whom the claim is initiated.

**receiver**

[Agent](#agent)!

The economic agent whom the claim is for.

**resourceClassifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**resourceConformsTo**

[ResourceSpecification](#resourcespecification)

The primary resource specification or definition of an existing or potential economic resource. A resource will have only one, as this specifies exactly what the resource is.

**resourceQuantity**

[Measure](#measure)

The amount and unit of the economic resource counted or inventoried.

**triggeredBy**

[EconomicEvent](#economicevent)!

The economic event which already occurred which this claim has been made against.

### ClaimResponse

Field

Argument

Type

Description

**claim**

[Claim](#claim)

### Commitment

A planned economic flow that has been promised by an agent to another agent.

Field

Argument

Type

Description

**action**

[Action](#action)!

Relates a commitment to a verb, such as consume, produce, work, improve, etc.

**agreedIn**

[URI](#uri)

Reference to an agreement between agents which specifies the rules or policies or calculations which govern this commitment.

**atLocation**

[SpatialThing](#spatialthing)

The place where a commitment occurs. Usually mappable.

**clauseOf**

[Agreement](#agreement)

This commitment is part of the exchange agreement.

**created**

[DateTime](#datetime)

The creation time of the commitment.

**deletable**

[Boolean](#boolean)

The commitment can be safely deleted, has no dependent information.

**due**

[DateTime](#datetime)

The time something is expected to be complete.

**effortQuantity**

[Measure](#measure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**finished**

[Boolean](#boolean)

The commitment is complete or not. This is irrespective of if the original goal has been met, and indicates that no more will be done.

**fulfilledBy**

[[Fulfillment](#fulfillment)!]

The economic event which completely or partially fulfills a commitment.

**hasBeginning**

[DateTime](#datetime)

The planned beginning of the commitment.

**hasEnd**

[DateTime](#datetime)

The planned end of the commitment.

**hasPointInTime**

[DateTime](#datetime)

The planned date/time for the commitment. Can be used instead of beginning and end.

**id**

[ID](#id)!

**inScopeOf**

[[AccountingScope](#accountingscope)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**independentDemandOf**

[Plan](#plan)

Represents a desired deliverable expected from this plan.

**inputOf**

[Process](#process)

Defines the process to which this commitment is an input.

**involvedAgents**

[[Agent](#agent)!]

**note**

[String](#string)

A textual description or comment.

**outputOf**

[Process](#process)

Defines the process for which this commitment is an output.

**provider**

[Agent](#agent)!

The economic agent from whom the commitment is initiated.

**receiver**

[Agent](#agent)!

The economic agent whom the commitment is for.

**resourceClassifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**resourceConformsTo**

[ResourceSpecification](#resourcespecification)

The primary resource specification or definition of an existing or potential economic resource. A resource will have only one, as this specifies exactly what the resource is.

**resourceInventoriedAs**

[EconomicResource](#economicresource)

Exact economic resource involved in the commitment.

**resourceQuantity**

[Measure](#measure)

The amount and unit of the economic resource counted or inventoried.

**satisfies**

[[Satisfaction](#satisfaction)!]

An intent satisfied fully or partially by an economic event or commitment.

### CommitmentResponse

Field

Argument

Type

Description

**commitment**

[Commitment](#commitment)

### Duration

A Duration represents an interval between two DateTime values.

Field

Argument

Type

Description

**numericDuration**

[Float](#float)!

A number representing the duration, will be paired with a unit.

**unitType**

[TimeUnit](#timeunit)!

A unit of measure.

### EconomicEvent

An observed economic flow, as opposed to a flow planned to happen in the future. This could reflect a change in the quantity of an economic resource. It is also defined by its behavior in relation to the economic resource (see Action)

Field

Argument

Type

Description

**action**

[Action](#action)!

Relates an economic event to a verb, such as consume, produce, work, improve, etc.

**agreedIn**

[URI](#uri)

Reference to an agreement between agents which specifies the rules or policies or calculations which govern this economic event.

**appreciatedBy**

[[Appreciation](#appreciation)!]

**appreciationOf**

[[Appreciation](#appreciation)!]

**atLocation**

[SpatialThing](#spatialthing)

The place where an economic event occurs. Usually mappable.

**calculatedUsing**

[ValueCalculation](#valuecalculation)

The value calculation (if any) used to generate this event.

**deletable**

[Boolean](#boolean)

The economic event can be safely deleted, has no dependent information.

**effortQuantity**

[Measure](#measure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**fulfills**

[[Fulfillment](#fulfillment)!]

The commitment which is completely or partially fulfilled by an economic event.

**hasBeginning**

[DateTime](#datetime)

The beginning of the economic event.

**hasEnd**

[DateTime](#datetime)

The end of the economic event.

**hasPointInTime**

[DateTime](#datetime)

The date/time at which the economic event occurred. Can be used instead of beginning and end.

**id**

[ID](#id)!

**inScopeOf**

[[AccountingScope](#accountingscope)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**inputOf**

[Process](#process)

Defines the process to which this event is an input.

**note**

[String](#string)

A textual description or comment.

**outputOf**

[Process](#process)

Defines the process for which this event is an output.

**provider**

[Agent](#agent)!

The economic agent from whom the actual economic event is initiated.

**realizationOf**

[Agreement](#agreement)

This economic event occurs as part of this agreement.

**receiver**

[Agent](#agent)!

The economic agent whom the actual economic event is for.

**resourceClassifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**resourceConformsTo**

[ResourceSpecification](#resourcespecification)

The primary resource specification or definition of an existing or potential economic resource. A resource will have only one, as this specifies exactly what the resource is.

**resourceInventoriedAs**

[EconomicResource](#economicresource)

Economic resource involved in the economic event.

**resourceQuantity**

[Measure](#measure)

The amount and unit of the economic resource counted or inventoried. This is the quantity that could be used to increment or decrement a resource, depending on the type of resource and resource effect of action.

**satisfies**

[[Satisfaction](#satisfaction)!]

An intent satisfied fully or partially by an economic event or commitment.

**tags**

[[AnyContext](#anycontext)]

Tags/Categories in a taxonomy, linked to resourceClassifiedAs: References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**toResourceInventoriedAs**

[EconomicResource](#economicresource)

Additional economic resource on the economic event when needed by the receiver. Used when a transfer or move, or sometimes other actions, requires explicitly identifying an economic resource on the receiving side.

**trace**

[[ProductionFlowItem](#productionflowitem)!]

recurseLimit

[Int](#int)

**track**

[[ProductionFlowItem](#productionflowitem)!]

recurseLimit

[Int](#int)

**triggeredBy**

[EconomicEvent](#economicevent)

References another economic event that implied this economic event, often based on a prior agreement.

### EconomicEventPage

A page of Economic Events

Field

Argument

Type

Description

**edges**

[[EconomicEvent](#economicevent)!]!

**pageInfo**

[PageInfo](#pageinfo)!

**totalCount**

[Int](#int)!

### EconomicEventResponse

Field

Argument

Type

Description

**economicEvent**

[EconomicEvent](#economicevent)!

Details of the newly created event.

**economicResource**

[EconomicResource](#economicresource)

Details of any newly created EconomicResource, for events that create new resources.

**reciprocalEvents**

[[EconomicEvent](#economicevent)!]

Any reciprocal events created by found value calculations.

### EconomicResource

A resource which is useful to people or the ecosystem.

Field

Argument

Type

Description

**accountingQuantity**

[Measure](#measure)

The current amount and unit of the economic resource for which the agent has primary rights and responsibilities, sometimes thought of as ownership. This can be either stored or derived from economic events affecting the resource.

**classifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**conformsTo**

[ResourceSpecification](#resourcespecification)

The primary resource specification or definition of an existing or potential economic resource. A resource will have only one, as this specifies exactly what the resource is.

**containedIn**

[EconomicResource](#economicresource)

Used when a stock economic resource contains items also defined as economic resources.

**contains**

[[EconomicResource](#economicresource)!]

Used when a stock economic resource contains units also defined as economic resources.

**currentLocation**

[SpatialThing](#spatialthing)

The current place an economic resource is located. Could be at any level of granularity, from a town to an address to a warehouse location. Usually mappable.

**id**

[ID](#id)!

**image**

[URI](#uri)

The uri to an image relevant to the resource, such as a photo, diagram, etc.

**lot**

[ProductBatch](#productbatch)

Lot or batch of an economic resource, used to track forward or backwards to all occurrences of resources of that lot. Note more than one resource can be of the same lot.

**name**

[String](#string)

An informal or formal textual identifier for an item. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**onhandQuantity**

[Measure](#measure)

The current amount and unit of the economic resource which is under direct control of the agent. It may be more or less than the accounting quantity. This can be either stored or derived from economic events affecting the resource.

**primaryAccountable**

[Agent](#agent)

The agent currently with primary rights and responsibilites for the economic resource. It is the agent that is associated with the accountingQuantity of the economic resource.

**stage**

[ProcessSpecification](#processspecification)

References the ProcessSpecification of the last process the desired economic resource went through. Stage is used when the last process is important for finding proper resources, such as where the publishing process wants only documents that have gone through the editing process.

**state**

[Action](#action)

The state of the desired economic resource (pass or fail), after coming out of a test or review process. Can be derived from the last event if a pass or fail event.

**tags**

[[AnyContext](#anycontext)!]

Tags/Categories in a taxonomy, linked to resourceClassifiedAs: References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**trace**

[[ProductionFlowItem](#productionflowitem)!]

recurseLimit

[Int](#int)

**track**

[[ProductionFlowItem](#productionflowitem)!]

recurseLimit

[Int](#int)

**trackingIdentifier**

[String](#string)

Sometimes called serial number, used when each item must have a traceable identifier (like a computer). Could also be used for other unique tracking identifiers needed for resources.

**unitOfEffort**

[Unit](#unit)

The unit used for use or work or cite actions for this resource.

### EconomicResourcePage

A page of Economic Resources

Field

Argument

Type

Description

**edges**

[[EconomicResource](#economicresource)!]!

**pageInfo**

[PageInfo](#pageinfo)!

**totalCount**

[Int](#int)!

### EconomicResourceResponse

Field

Argument

Type

Description

**economicResource**

[EconomicResource](#economicresource)!

### Follow

Field

Argument

Type

Description

**followedCharacter**

[Character](#character)

**followedProfile**

[Profile](#profile)

**followerCharacter**

[Character](#character)

**followerProfile**

[Profile](#profile)

### Fulfillment

Represents many-to-many relationships between commitments and economic events that fully or partially satisfy one or more commitments.

Field

Argument

Type

Description

**effortQuantity**

[Measure](#measure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**fulfilledBy**

[EconomicEvent](#economicevent)!

The economic event which completely or partially fulfills a commitment.

**fulfills**

[Commitment](#commitment)!

The commitment which is completely or partially fulfilled by an economic event.

**id**

[ID](#id)!

**note**

[String](#string)

A textual description or comment.

**resourceQuantity**

[Measure](#measure)

The amount and unit of the economic resource counted or inventoried.

### FulfillmentResponse

Field

Argument

Type

Description

**fulfillment**

[Fulfillment](#fulfillment)

### Intent

A planned economic flow which has not been committed to, which can lead to economic events (sometimes through commitments).

Field

Argument

Type

Description

**action**

[Action](#action)!

Relates an intent to a verb, such as consume, produce, work, improve, etc.

**agreedIn**

[URI](#uri)

Reference to an agreement between agents which specifies the rules or policies or calculations which govern this intent.

**atLocation**

[SpatialThing](#spatialthing)

The place where an intent would occur. Usually mappable.

**availableQuantity**

[Measure](#measure)

The total quantity of the offered resource available.

**canonicalUrl**

[URI](#uri)

**deletable**

[Boolean](#boolean)

The intent can be safely deleted, has no dependent information.

**due**

[DateTime](#datetime)

The time something is expected to be complete.

**effortQuantity**

[Measure](#measure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**finished**

[Boolean](#boolean)

The intent is complete or not. This is irrespective of if the original goal has been met, and indicates that no more will be done.

**hasBeginning**

[DateTime](#datetime)

The planned beginning of the intent.

**hasEnd**

[DateTime](#datetime)

The planned end of the intent.

**hasPointInTime**

[DateTime](#datetime)

The planned date/time for the intent. Can be used instead of beginning and end.

**id**

[ID](#id)!

**image**

[URI](#uri)

The uri to an image relevant to the intent, such as a photo.

**inScopeOf**

[[AccountingScope](#accountingscope)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**inputOf**

[Process](#process)

Defines the process to which this intent is an input.

**name**

[String](#string)

An informal or formal textual identifier for an intent. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**outputOf**

[Process](#process)

Defines the process to which this intent is an output.

**provider**

[Agent](#agent)

The economic agent from whom the intent is initiated. This implies that the intent is an offer.

**publishedIn**

[[ProposedIntent](#proposedintent)!]

**receiver**

[Agent](#agent)

The economic agent whom the intent is for. This implies that the intent is a request.

**resourceClassifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**resourceConformsTo**

[ResourceSpecification](#resourcespecification)

The primary resource specification or definition of an existing or potential economic resource. A resource will have only one, as this specifies exactly what the resource is.

**resourceInventoriedAs**

[EconomicResource](#economicresource)

When a specific EconomicResource is known which can service the Intent, this defines that resource.

**resourceQuantity**

[Measure](#measure)

The amount and unit of the economic resource counted or inventoried. This is the quantity that could be used to increment or decrement a resource, depending on the type of resource and resource effect of action.

**satisfiedBy**

[[Satisfaction](#satisfaction)!]

**tags**

[[AnyContext](#anycontext)]

Tags/Categories in a taxonomy, linked to resourceClassifiedAs: References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

### IntentResponse

Field

Argument

Type

Description

**intent**

[Intent](#intent)!

### IntentsPage

A page of intents

Field

Argument

Type

Description

**edges**

[[Intent](#intent)!]!

**pageInfo**

[PageInfo](#pageinfo)!

**totalCount**

[Int](#int)!

### LoginResponse

Field

Argument

Type

Description

**currentAccountId**

[String](#string)

**currentUser**

[User](#user)

**currentUsername**

[String](#string)

**token**

[String](#string)

### Me

Field

Argument

Type

Description

**accountId**

[ID](#id)

**flagsForModeration**

[[Activity](#activity)]

paginate

[Paginate](#paginate)

**followed**

[[Follow](#follow)]

paginate

[Paginate](#paginate)

**followers**

[[Follow](#follow)]

paginate

[Paginate](#paginate)

**likeActivities**

[[Activity](#activity)]

paginate

[Paginate](#paginate)

**user**

[User](#user)

**userFeed**

[[Activity](#activity)]

paginate

[Paginate](#paginate)

**userNotifications**

[[Activity](#activity)]

paginate

[Paginate](#paginate)

**users**

[[User](#user)]

### Measure

Semantic meaning for measurements: binds a quantity to its measurement unit. See http://www.qudt.org/pages/QUDToverviewPage.html

Field

Argument

Type

Description

**canonicalUrl**

[URI](#uri)

Added for CommonsPub

**hasNumericalValue**

[Float](#float)!

A number representing the quantity, will be paired with a unit.

**hasUnit**

[Unit](#unit)!

A unit of measure.

**id**

[ID](#id)!

### MeasuresPage

Field

Argument

Type

Description

**edges**

[[Measure](#measure)!]

**pageInfo**

[PageInfo](#pageinfo)

**totalCount**

[Int](#int)

### ObservablePhenomenon

Possible qualitative assessment of an ObservableProperty. (eg. property “contamination” may have phenomenon like “high”, “some”, “none”)

Field

Argument

Type

Description

**choiceOf**

[ObservableProperty](#observableproperty)

What observable property does this assessment apply to?

**formulaQuantifier**

[Float](#float)

A numerical representation of this phenomenon, to be used when automatic analysis is needed (like value calculation formulas).

**id**

[ID](#id)!

**label**

[String](#string)!

A name for this phenomenon (eg. high, ripe, organic). Unique to each ObservableProperty.

**note**

[String](#string)

A textual description or comment.

### ObservablePhenomenonPage

Field

Argument

Type

Description

**edges**

[[ObservablePhenomenon](#observablephenomenon)!]!

**pageInfo**

[PageInfo](#pageinfo)!

**totalCount**

[Int](#int)!

### ObservableProperty

Types of things that can be observed or measured as part of Observation.

Field

Argument

Type

Description

**hasChoices**

[[ObservablePhenomenon](#observablephenomenon)!]

**id**

[ID](#id)!

**label**

[String](#string)!

A name for something that can be observed (eg, temperature, weight, contamination…)

**note**

[String](#string)

A textual description or comment.

### ObservablePropertyPage

Field

Argument

Type

Description

**edges**

[[ObservableProperty](#observableproperty)!]!

**pageInfo**

[PageInfo](#pageinfo)!

**totalCount**

[Int](#int)!

### Observation

An observation event that records the measurement or assessement of an economic resource.

Field

Argument

Type

Description

**atLocation**

[SpatialThing](#spatialthing)

The place where an observation occured. Usually mappable.

**hasFeatureOfInterest**

[ObservableObject](#observableobject)!

Thing that was observed (like EconomicResource or Agent)

**hasResult**

[ObservableResult](#observableresult)!

The result of the observation, which can be one of: - Unit and measurement of what was observed (in the case of quantitative measurements) - Name and other information (using ObservablePhenomenon) about what was observed (in the case of qualitative measurements)

**id**

[ID](#id)!

**inScopeOf**

[[AccountingScope](#accountingscope)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**madeBySensor**

[Observer](#observer)!

The person (Agent) or a machine like a sensor (EconomicResource or ResourceSpecification) who actually conducted the observation

**note**

[String](#string)

A textual description or comment.

**observedDuring**

[Process](#process)

Optionally defines the economic process during which this event occured

**observedProperty**

[ObservableProperty](#observableproperty)!

Type of measurement (eg, temperature, weight…).

**provider**

[Agent](#agent)!

The agent who is providing the observation

**resultTime**

[DateTime](#datetime)!

The date and time at which the observation event.

### ObservationPage

Field

Argument

Type

Description

**edges**

[[Observation](#observation)!]!

**pageInfo**

[PageInfo](#pageinfo)!

**totalCount**

[Int](#int)!

### Organization

A formal or informal group, or legal organization.

Field

Argument

Type

Description

**agentType**

[AgentType](#agenttype)

**canonicalUrl**

[String](#string)

**commitments**

[[Commitment](#commitment)!]

filter

[agentCommitmentSearchParams](#agentcommitmentsearchparams)

**displayUsername**

[String](#string)

**economicEvents**

[[EconomicEvent](#economicevent)!]

filter

[agentEventSearchParams](#agenteventsearchparams)

**id**

[ID](#id)!

**image**

[URI](#uri)

The uri to an image relevant to the agent, such as a logo, avatar, photo, etc.

**inScopeOf**

[[AccountingScope](#accountingscope)!]

**intents**

[[Intent](#intent)!]

filter

[IntentSearchParams](#intentsearchparams)

**inventoriedEconomicResources**

[[EconomicResource](#economicresource)!]

filter

[agentResourceSearchParams](#agentresourcesearchparams)

**name**

[String](#string)!

The name that this agent will be referred to by.

**note**

[String](#string)

A textual description or comment.

**plans**

[[Plan](#plan)!]

filter

[agentPlanSearchParams](#agentplansearchparams)

**primaryLocation**

[SpatialThing](#spatialthing)

The main place an agent is located, often an address where activities occur and mail can be sent. This is usually a mappable geographic location. It also could be a website address, as in the case of agents who have no physical location.

**processes**

[[Process](#process)!]

filter

[agentProcessSearchParams](#agentprocesssearchparams)

**proposals**

[[Proposal](#proposal)!]

**relationships**

[[AgentRelationship](#agentrelationship)!]

roleId

[ID](#id)

**relationshipsAsObject**

[[AgentRelationship](#agentrelationship)!]

roleId

[ID](#id)

**relationshipsAsSubject**

[[AgentRelationship](#agentrelationship)!]

roleId

[ID](#id)

**roles**

[[AgentRelationshipRole](#agentrelationshiprole)!]

### OrganizationResponse

Field

Argument

Type

Description

**agent**

[Organization](#organization)!

### PageInfo

Cursors for pagination

Field

Argument

Type

Description

**endCursor**

[[Cursor](#cursor)!]

Cursor pointing to the last of the results returned, to be used with after query parameter if the backend supports forward pagination.

**hasNextPage**

[Boolean](#boolean)

True if there are more results after endCursor. If unable to be determined, implementations should return true to allow for requerying.

**hasPreviousPage**

[Boolean](#boolean)

True if there are more results before startCursor. If unable to be determined, implementations should return true to allow for requerying.

**startCursor**

[[Cursor](#cursor)!]

Cursor pointing to the first of the results returned, to be used with before query parameter if the backend supports reverse pagination.

**totalCount**

[Int](#int)

Returns the total result count, if it can be determined.

### Person

A natural person.

Field

Argument

Type

Description

**agentType**

[AgentType](#agenttype)

**canonicalUrl**

[String](#string)

**commitments**

[[Commitment](#commitment)!]

filter

[agentCommitmentSearchParams](#agentcommitmentsearchparams)

**displayUsername**

[String](#string)

**economicEvents**

[[EconomicEvent](#economicevent)!]

filter

[agentEventSearchParams](#agenteventsearchparams)

**id**

[ID](#id)!

**image**

[URI](#uri)

The uri to an image relevant to the agent, such as a logo, avatar, photo, etc.

**intents**

[[Intent](#intent)!]

filter

[IntentSearchParams](#intentsearchparams)

**inventoriedEconomicResources**

[[EconomicResource](#economicresource)!]

filter

[agentResourceSearchParams](#agentresourcesearchparams)

**name**

[String](#string)!

The name that this agent will be referred to by.

**note**

[String](#string)

A textual description or comment.

**plans**

[[Plan](#plan)!]

filter

[agentPlanSearchParams](#agentplansearchparams)

**primaryLocation**

[SpatialThing](#spatialthing)

The main place an agent is located, often an address where activities occur and mail can be sent. This is usually a mappable geographic location. It also could be a website address, as in the case of agents who have no physical location.

**processes**

[[Process](#process)!]

filter

[agentProcessSearchParams](#agentprocesssearchparams)

**proposals**

[[Proposal](#proposal)!]

**relationships**

[[AgentRelationship](#agentrelationship)!]

roleId

[ID](#id)

**relationshipsAsObject**

[[AgentRelationship](#agentrelationship)!]

roleId

[ID](#id)

**relationshipsAsSubject**

[[AgentRelationship](#agentrelationship)!]

roleId

[ID](#id)

**roles**

[[AgentRelationshipRole](#agentrelationshiprole)!]

### PersonResponse

Field

Argument

Type

Description

**agent**

[Person](#person)!

### Plan

A logical collection of processes that constitute a body of planned work with defined deliverable(s).

Field

Argument

Type

Description

**created**

[DateTime](#datetime)

The time the plan was made.

**deletable**

[Boolean](#boolean)

The plan is able to be deleted or not.

**due**

[DateTime](#datetime)

The time the plan is expected to be complete.

**id**

[ID](#id)!

**inScopeOf**

[[AccountingScope](#accountingscope)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**independentDemands**

[[Commitment](#commitment)!]

**name**

[String](#string)

An informal or formal textual identifier for a plan. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**processes**

[[Process](#process)!]

filter

[planProcessSearchParams](#planprocesssearchparams)

**refinementOf**

[Scenario](#scenario)

This plan refines a scenario, making it operational.

### PlanResponse

Field

Argument

Type

Description

**plan**

[Plan](#plan)

### Post

Field

Argument

Type

Description

**activity**

[Activity](#activity)

**id**

[ID](#id)

**postContent**

[PostContent](#postcontent)

### PostContent

Field

Argument

Type

Description

**htmlBody**

[String](#string)

**summary**

[String](#string)

**title**

[String](#string)

### Process

An activity that changes inputs into outputs. It could transform or transport economic resource(s).

Field

Argument

Type

Description

**basedOn**

[ProcessSpecification](#processspecification)

The definition or specification for a process.

**classifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**committedInputs**

[[Commitment](#commitment)!]

action

[ID](#id)

**committedOutputs**

[[Commitment](#commitment)!]

action

[ID](#id)

**deletable**

[Boolean](#boolean)

The process can be safely deleted, has no dependent information.

**finished**

[Boolean](#boolean)

The process is complete or not. This is irrespective of if the original goal has been met, and indicates that no more will be done.

**hasBeginning**

[DateTime](#datetime)

The planned beginning of the process.

**hasEnd**

[DateTime](#datetime)

The planned end of the process.

**id**

[ID](#id)!

**inScopeOf**

[[AccountingScope](#accountingscope)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**inputs**

[[EconomicEvent](#economicevent)!]

action

[ID](#id)

**intendedInputs**

[[Intent](#intent)!]

action

[ID](#id)

filter

[IntentSearchParams](#intentsearchparams)

**intendedOutputs**

[[Intent](#intent)!]

action

[ID](#id)

filter

[IntentSearchParams](#intentsearchparams)

**name**

[String](#string)!

An informal or formal textual identifier for a process. Does not imply uniqueness.

**nestedIn**

[Scenario](#scenario)

The process with its inputs and outputs is part of the scenario.

**nextProcesses**

[[Process](#process)!]

**note**

[String](#string)

A textual description or comment.

**outputs**

[[EconomicEvent](#economicevent)!]

action

[ID](#id)

**plannedWithin**

[Plan](#plan)

The process with its inputs and outputs is part of the plan.

**previousProcesses**

[[Process](#process)!]

**tags**

[[AnyContext](#anycontext)!]

Tags/Categories in a taxonomy, linked to resourceClassifiedAs: References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**trace**

[[ProductionFlowItem](#productionflowitem)!]

recurseLimit

[Int](#int)

**track**

[[ProductionFlowItem](#productionflowitem)!]

recurseLimit

[Int](#int)

**unplannedEconomicEvents**

[[EconomicEvent](#economicevent)!]

action

[ID](#id)

**workingAgents**

[[Agent](#agent)!]

### ProcessPage

A page of Processes

Field

Argument

Type

Description

**edges**

[[Process](#process)!]!

**pageInfo**

[PageInfo](#pageinfo)!

**totalCount**

[Int](#int)!

### ProcessResponse

Field

Argument

Type

Description

**process**

[Process](#process)

### ProcessSpecification

Specifies the kind of process.

Field

Argument

Type

Description

**id**

[ID](#id)!

**name**

[String](#string)!

An informal or formal textual identifier for the process. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

### ProcessSpecificationResponse

Field

Argument

Type

Description

**processSpecification**

[ProcessSpecification](#processspecification)

### ProductBatch

A lot or batch, defining a resource produced at the same time in the same way. From DataFoodConsortium vocabulary https://datafoodconsortium.gitbook.io/dfc-standard-documentation/.

Field

Argument

Type

Description

**batchNumber**

[String](#string)!

The standard unique identifier of the batch.

**expiryDate**

[DateTime](#datetime)

Expiration date of the batch, commonly used for food.

**id**

[ID](#id)!

**productionDate**

[DateTime](#datetime)

Date the batch was produced. Can be derived from the economic event of production.

### ProductBatchResponse

Field

Argument

Type

Description

**productBatch**

[ProductBatch](#productbatch)!

### Profile

Field

Argument

Type

Description

**name**

[String](#string)

**summary**

[String](#string)

### Proposal

Published requests or offers, sometimes with what is expected in return.

Field

Argument

Type

Description

**canonicalUrl**

[URI](#uri)

**created**

[DateTime](#datetime)

The date and time the proposal was created.

**creator**

[Agent](#agent)

**eligibleLocation**

[SpatialThing](#spatialthing)

Location or area where the proposal is valid.

**hasBeginning**

[DateTime](#datetime)

The beginning time of proposal publication.

**hasEnd**

[DateTime](#datetime)

The end time of proposal publication.

**id**

[ID](#id)!

**inScopeOf**

[[AccountingScope](#accountingscope)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**name**

[String](#string)

An informal or formal textual identifier for a proposal. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**publishedTo**

[[ProposedTo](#proposedto)!]

Which Agent(s) (if any were specified) was this proposed to?

**publishes**

[[ProposedIntent](#proposedintent)!]

Intent(s) published as part of to this proposal

**unitBased**

[Boolean](#boolean)

This proposal contains unit based quantities, which can be multipied to create commitments; commonly seen in a price list or e-commerce.

### ProposalResponse

Field

Argument

Type

Description

**proposal**

[Proposal](#proposal)

### ProposalsPage

A page of proposals

Field

Argument

Type

Description

**edges**

[[Proposal](#proposal)!]!

**pageInfo**

[PageInfo](#pageinfo)!

**totalCount**

[Int](#int)!

### ProposedIntent

Represents many-to-many relationships between Proposals and Intents, supporting including intents in multiple proposals, as well as a proposal including multiple intents.

Field

Argument

Type

Description

**id**

[ID](#id)!

**publishedIn**

[Proposal](#proposal)!

The published proposal which this intent is part of.

**publishes**

[Intent](#intent)!

The intent which is part of this published proposal.

**reciprocal**

[Boolean](#boolean)

This is a reciprocal intent of this proposal, not primary. Not meant to be used for intent matching.

### ProposedIntentResponse

Field

Argument

Type

Description

**proposedIntent**

[ProposedIntent](#proposedintent)

### ProposedTo

An agent to which the proposal is to be published. A proposal can be published to many agents.

Field

Argument

Type

Description

**id**

[ID](#id)!

**proposed**

[Proposal](#proposal)!

The proposal that is published to a specific agent.

**proposedTo**

[Agent](#agent)!

The agent to which the proposal is published.

### ProposedToResponse

Field

Argument

Type

Description

**proposedTo**

[ProposedTo](#proposedto)

### RecipeExchange

Specifies an exchange agreement as part of a recipe.

Field

Argument

Type

Description

**id**

[ID](#id)!

**name**

[String](#string)!

An informal or formal textual identifier for a recipe exchange. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

### RecipeExchangeResponse

Field

Argument

Type

Description

**recipeExchange**

[RecipeExchange](#recipeexchange)

### RecipeFlow

The specification of a resource inflow to, or outflow from, a recipe process.

Field

Argument

Type

Description

**action**

[Action](#action)!

Relates a process input or output to a verb, such as consume, produce, work, modify, etc.

**effortQuantity**

[Measure](#measure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**id**

[ID](#id)!

**note**

[String](#string)

A textual description or comment.

**recipeFlowResource**

[RecipeResource](#reciperesource)

The resource definition referenced by this flow in the recipe.

**recipeInputOf**

[RecipeProcess](#recipeprocess)

Relates an input flow to its process in a recipe.

**recipeOutputOf**

[RecipeProcess](#recipeprocess)

Relates an output flow to its process in a recipe.

**resourceQuantity**

[Measure](#measure)

The amount and unit of the economic resource counted or inventoried.

### RecipeFlowResponse

Field

Argument

Type

Description

**recipeFlow**

[RecipeFlow](#recipeflow)

### RecipeProcess

Specifies a process in a recipe for use in planning from recipe.

Field

Argument

Type

Description

**hasDuration**

[Duration](#duration)

The planned calendar duration of the process as defined for the recipe batch.

**id**

[ID](#id)!

**name**

[String](#string)!

An informal or formal textual identifier for a recipe process. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**processClassifiedAs**

[[URI](#uri)!]

References a concept in a common taxonomy or other classification scheme for purposes of categorization.

**processConformsTo**

[ProcessSpecification](#processspecification)

The standard specification or definition of a process.

### RecipeProcessResponse

Field

Argument

Type

Description

**recipeProcess**

[RecipeProcess](#recipeprocess)

### RecipeResource

Specifies the resource as part of a recipe, for use in planning from recipe.

Field

Argument

Type

Description

**id**

[ID](#id)!

**image**

[URI](#uri)

The uri to an image relevant to the entity, such as a photo, diagram, etc.

**name**

[String](#string)!

An informal or formal textual identifier for a recipe resource. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**resourceClassifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**resourceConformsTo**

[ResourceSpecification](#resourcespecification)

The primary resource specification or definition of an existing or potential economic resource. A resource will have only one, as this specifies exactly what the resource is.

**substitutable**

[Boolean](#boolean)

Defines if any resource of that type can be freely substituted for any other resource of that type when used, consumed, traded, etc.

**unitOfEffort**

[Unit](#unit)

The unit used for use action on this resource or work action in the recipe.

**unitOfResource**

[Unit](#unit)

The unit of inventory used for this resource in the recipe.

### RecipeResourceResponse

Field

Argument

Type

Description

**recipeResource**

[RecipeResource](#reciperesource)

### Replied

Field

Argument

Type

Description

**activity**

[Activity](#activity)

**directReplies**

[[Replied](#replied)]

paginate

[Paginate](#paginate)

**post**

[Post](#post)

**postContent**

[PostContent](#postcontent)

**replyToId**

[ID](#id)

**threadId**

[ID](#id)

### ResourceSpecification

Specification of a kind of resource. Could define a material item, service, digital item, currency account, etc. Used instead of a classification when more information is needed, particularly for recipes.

Field

Argument

Type

Description

**conformingResources**

[[EconomicResource](#economicresource)!]

**defaultUnitOfEffort**

[Unit](#unit)

The default unit used for use or work.

**defaultUnitOfResource**

[Unit](#unit)

The default unit used for the resource itself.

**id**

[ID](#id)!

**image**

[URI](#uri)

The uri to an image relevant to the entity, such as a photo, diagram, etc.

**name**

[String](#string)!

An informal or formal textual identifier for a type of resource. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**resourceClassifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**tags**

[[AnyContext](#anycontext)!]

Tags/Categories in a taxonomy, linked to resourceClassifiedAs: References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

### ResourceSpecificationPage

Field

Argument

Type

Description

**edges**

[[ResourceSpecification](#resourcespecification)!]!

**pageInfo**

[PageInfo](#pageinfo)!

**totalCount**

[Int](#int)!

### ResourceSpecificationResponse

Field

Argument

Type

Description

**resourceSpecification**

[ResourceSpecification](#resourcespecification)

### RootSubscriptionType

Field

Argument

Type

Description

**intentCreated**

[Intent](#intent)

context

[String](#string)

### Satisfaction

Represents many-to-many relationships between intents and commitments or events that partially or full satisfy one or more intents.

Field

Argument

Type

Description

**effortQuantity**

[Measure](#measure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**id**

[ID](#id)!

**note**

[String](#string)

A textual description or comment.

**resourceQuantity**

[Measure](#measure)

The amount and unit of the economic resource counted or inventoried.

**satisfiedBy**

[EventOrCommitment](#eventorcommitment)!

A commitment or economic event fully or partially satisfying an intent.

**satisfies**

[Intent](#intent)!

An intent satisfied fully or partially by an economic event or commitment.

### SatisfactionResponse

Field

Argument

Type

Description

**satisfaction**

[Satisfaction](#satisfaction)

### Scenario

An estimated or analytical logical collection of higher level processes used for budgeting, analysis, plan refinement, etc.

Field

Argument

Type

Description

**definedAs**

[ScenarioDefinition](#scenariodefinition)

The scenario definition for this scenario, for example yearly budget.

**hasBeginning**

[DateTime](#datetime)

The beginning date/time of the scenario, often the beginning of an accounting period.

**hasEnd**

[DateTime](#datetime)

The ending date/time of the scenario, often the end of an accounting period.

**id**

[ID](#id)!

**inScopeOf**

[[AccountingScope](#accountingscope)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**name**

[String](#string)!

An informal or formal textual identifier for a scenario. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**refinementOf**

[Scenario](#scenario)

This scenario refines another scenario, often as time moves closer or for more detail.

### ScenarioDefinition

The type definition of one or more scenarios, such as Yearly Budget.

Field

Argument

Type

Description

**hasDuration**

[Duration](#duration)

The duration of the scenario, often an accounting period.

**id**

[ID](#id)!

**name**

[String](#string)!

An informal or formal textual identifier for a scenario definition. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

### ScenarioDefinitionResponse

Field

Argument

Type

Description

**scenarioDefinition**

[ScenarioDefinition](#scenariodefinition)

### ScenarioResponse

Field

Argument

Type

Description

**scenario**

[Scenario](#scenario)

### Settlement

Represents many-to-many relationships between claim and economic events that fully or partially settle one or more claims.

Field

Argument

Type

Description

**effortQuantity**

[Measure](#measure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**id**

[ID](#id)!

**note**

[String](#string)

A textual description or comment.

**resourceQuantity**

[Measure](#measure)

The amount and unit of the economic resource counted or inventoried.

**settledBy**

[EconomicEvent](#economicevent)!

The economic event fully or partially settling a claim.

**settles**

[Claim](#claim)!

A claim which is fully or partially settled by an economic event.

### SettlementResponse

Field

Argument

Type

Description

**settlement**

[Settlement](#settlement)

### SpatialThing

A physical mappable location.

Field

Argument

Type

Description

**alt**

[Float](#float)

Altitude.

**canonicalUrl**

[String](#string)

**displayUsername**

[String](#string)

**geom**

[Json](#json)

**id**

[ID](#id)!

**inScopeOf**

[AnyContext](#anycontext)

**lat**

[Float](#float)

Latitude.

**long**

[Float](#float)

Longitude.

**mappableAddress**

[String](#string)

An address that will be recognized as mappable by mapping software.

**name**

[String](#string)!

An informal or formal textual identifier for a location. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

### SpatialThingResponse

Field

Argument

Type

Description

**spatialThing**

[SpatialThing](#spatialthing)

### SpatialThingsPage

Field

Argument

Type

Description

**edges**

[[SpatialThing](#spatialthing)]

**pageInfo**

[PageInfo](#pageinfo)

**totalCount**

[Int](#int)

### Tag

A tag could be a category or hashtag or user or community or etc

Field

Argument

Type

Description

**canonicalUrl**

[String](#string)

Unique URL (on original instance)

**context**

[AnyContext](#anycontext)

The object used as a tag (eg. Category, Geolocation, Hashtag, User…)

**displayUsername**

[String](#string)

Unique URL (on original instance)

**facet**

[String](#string)

Type of tag (i.e. context)

**id**

[ID](#id)

The primary key of the tag

**name**

[String](#string)

Name of the tag (derived from its context)

**prefix**

[String](#string)

What character is used to trigger this tag (eg. @, #, +)

**summary**

[String](#string)

Description of the tag (derived from its context)

**tagged**

[[AnyContext](#anycontext)]

Objects that were tagged with this tag

### Unit

Defines a unit of measurement, along with its display symbol. From OM2 vocabulary.

Field

Argument

Type

Description

**canonicalUrl**

[URI](#uri)

Added for CommonsPub

**id**

[ID](#id)!

**inScopeOf**

[AnyContext](#anycontext)

**label**

[String](#string)!

A human readable label for the unit, can be language specific.

**symbol**

[String](#string)!

A standard display symbol for a unit of measure.

### UnitResponse

Field

Argument

Type

Description

**unit**

[Unit](#unit)

### UnitsPage

Field

Argument

Type

Description

**edges**

[[Unit](#unit)!]

**pageInfo**

[PageInfo](#pageinfo)

**totalCount**

[Int](#int)

### User

Field

Argument

Type

Description

**boostActivities**

[[Activity](#activity)]

paginate

[Paginate](#paginate)

**character**

[Character](#character)

**id**

[ID](#id)

**posts**

[[Post](#post)]

paginate

[Paginate](#paginate)

**profile**

[Profile](#profile)

**userActivities**

[[Activity](#activity)]

paginate

[Paginate](#paginate)

### ValueCalculation

A calculation performed using custom formulas for a certain context.

Field

Argument

Type

Description

**action**

[Action](#action)!

Relates a value calculation to a verb, such as consume, produce, work, improve, etc.

**formula**

[String](#string)!

**id**

[ID](#id)!

**inScopeOf**

[[AccountingScope](#accountingscope)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**name**

[String](#string)

An informal or formal textual identifier for an item. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**resourceClassifiedAs**

[[URI](#uri)!]

References a concept in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**resourceConformsTo**

[ResourceSpecification](#resourcespecification)

Used to filter valueCalculations to find the one that matches the event.

**valueAction**

[Action](#action)!

Relates a value calculation to a verb, like action, but for the related event.

**valueResourceConformsTo**

[ResourceSpecification](#resourcespecification)

The resource specification the event will apply to.

**valueUnit**

[Unit](#unit)!

References the unit used for the event.

### ValueCalculationPage

Field

Argument

Type

Description

**edges**

[[ValueCalculation](#valuecalculation)!]!

**pageInfo**

[PageInfo](#pageinfo)!

**totalCount**

[Int](#int)!

### ValueCalculationResponse

Field

Argument

Type

Description

**valueCalculation**

[ValueCalculation](#valuecalculation)

### Verb

Field

Argument

Type

Description

**verb**

[String](#string)

**verbDisplay**

[String](#string)

## Inputs

### ActivityFilters

Field

Type

Description

**activityId**

[ID](#id)

**objectId**

[ID](#id)

### AgentCreateParams

Field

Type

Description

**image**

[URI](#uri)

The uri to an image relevant to the agent, such as a logo, avatar, photo, etc.

**name**

[String](#string)!

An informal or formal textual identifier for an agent. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**primaryLocation**

[ID](#id)

(SpatialThing) The main place an agent is located, often an address where activities occur and mail can be sent. This is usually a mappable geographic location. It also could be a website address, as in the case of agents who have no physical location.

### AgentRelationshipCreateParams

Field

Type

Description

**note**

[String](#string)

A textual description or comment.

**object**

[ID](#id)!

(Agent) The object of a relationship between 2 agents. For example, if Mary is a member of a group, then the group is the object.

**relationship**

[ID](#id)!

(AgentRelationshipRole) The role of an economic relationship that exists between 2 agents, such as member, trading partner.

**subject**

[ID](#id)!

(Agent) The subject of a relationship between 2 agents. For example, if Mary is a member of a group, then Mary is the subject.

### AgentRelationshipRoleCreateParams

Field

Type

Description

**inverseRoleLabel**

[String](#string)

The human readable name of the role, inverse from the object to the subject. For example, ‘has member’.

**note**

[String](#string)

A textual description or comment.

**roleLabel**

[String](#string)!

The human readable name of the role, inverse from the object to the subject. For example, ‘is member of’.

### AgentRelationshipRoleUpdateParams

Field

Type

Description

**id**

[ID](#id)!

**inverseRoleLabel**

[String](#string)

The human readable name of the role, inverse from the object to the subject. For example, ‘has member’.

**note**

[String](#string)

A textual description or comment.

**roleLabel**

[String](#string)

The human readable name of the role, inverse from the object to the subject. For example, ‘is member of’.

### AgentRelationshipUpdateParams

Field

Type

Description

**id**

[ID](#id)!

**note**

[String](#string)

A textual description or comment.

**object**

[ID](#id)

(Agent) The object of a relationship between 2 agents. For example, if Mary is a member of a group, then the group is the object.

**relationship**

[ID](#id)

(AgentRelationshipRole) The role of an economic relationship that exists between 2 agents, such as member, trading partner.

**subject**

[ID](#id)

(Agent) The subject of a relationship between 2 agents. For example, if Mary is a member of a group, then Mary is the subject.

### AgentUpdateParams

Field

Type

Description

**id**

[ID](#id)!

**image**

[URI](#uri)

The uri to an image relevant to the agent, such as a logo, avatar, photo, etc.

**name**

[String](#string)

An informal or formal textual identifier for an agent. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**primaryLocation**

[ID](#id)

(SpatialThing) The main place an agent is located, often an address where activities occur and mail can be sent. This is usually a mappable geographic location. It also could be a website address, as in the case of agents who have no physical location.

### AgreementCreateParams

Field

Type

Description

**created**

[DateTime](#datetime)!

The date and time the agreement was created.

**name**

[String](#string)!

An informal or formal textual identifier for an agreement. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

### AgreementUpdateParams

Field

Type

Description

**created**

[DateTime](#datetime)

The date and time the agreement was created.

**id**

[ID](#id)!

**name**

[String](#string)

An informal or formal textual identifier for an agreement. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

### AppreciationCreateParams

Field

Type

Description

**appreciationOf**

[ID](#id)!

(EconomicEvent) The economic event this appreciation has been given in acknowledgement of.

**appreciationWith**

[ID](#id)!

(EconomicEvent) The economic event provided as a gift in this appreciation.

**note**

[String](#string)

A textual description or comment.

### AppreciationUpdateParams

Field

Type

Description

**appreciationOf**

[ID](#id)

(EconomicEvent) The economic event this appreciation has been given in acknowledgement of.

**appreciationWith**

[ID](#id)

(EconomicEvent) The economic event provided as a gift in this appreciation.

**id**

[ID](#id)!

**note**

[String](#string)

A textual description or comment.

### CategoryInput

Field

Type

Description

**extraInfo**

[Json](#json)

A JSON document containing more info beyond the default fields

**facet**

[String](#string)

**name**

[String](#string)!

**parentCategory**

[ID](#id)

**prefix**

[String](#string)

**sameAsCategory**

[ID](#id)

**summary**

[String](#string)

### CharacterFilters

Field

Type

Description

**autocomplete**

[String](#string)

**id**

[ID](#id)

**username**

[String](#string)

### CharacterInput

Field

Type

Description

**username**

[String](#string)

### ClaimCreateParams

Field

Type

Description

**action**

[ID](#id)!

(Action) Relates a claim to a verb, such as consume, produce, work, improve, etc.

**agreedIn**

[URI](#uri)

Reference to an agreement between agents which specifies the rules or policies or calculations which govern this claim.

**created**

[DateTime](#datetime)

The data on which the claim was made.

**due**

[DateTime](#datetime)

The time the claim is expected to be settled.

**effortQuantity**

[IMeasure](#imeasure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**finished**

[Boolean](#boolean)

The claim is complete or not. This is irrespective of if the original goal has been met, and indicates that no more will be done.

**inScopeOf**

[[ID](#id)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**note**

[String](#string)

A textual description or comment.

**provider**

[ID](#id)!

(Agent) The economic agent from whom the claim is initiated.

**receiver**

[ID](#id)!

(Agent) The economic agent whom the claim is for.

**resourceClassifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**resourceConformsTo**

[ID](#id)

(ResourceSpecification) The primary resource specification or definition of an existing or potential economic resource. A resource will have only one, as this specifies exactly what the resource is.

**resourceQuantity**

[IMeasure](#imeasure)

The amount and unit of the economic resource counted or inventoried. This is the quantity that could be used to increment or decrement a resource, depending on the type of resource and resource effect of action.

**triggeredBy**

[ID](#id)

(EconomicEvent) The economic event which already occurred which this claim has been made against.

### ClaimUpdateParams

Field

Type

Description

**action**

[ID](#id)

(Action) Relates a claim to a verb, such as consume, produce, work, improve, etc.

**agreedIn**

[URI](#uri)

Reference to an agreement between agents which specifies the rules or policies or calculations which govern this claim.

**created**

[DateTime](#datetime)

The data on which the claim was made.

**due**

[DateTime](#datetime)

The time the claim is expected to be settled.

**effortQuantity**

[IMeasure](#imeasure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**finished**

[Boolean](#boolean)

The claim is complete or not. This is irrespective of if the original goal has been met, and indicates that no more will be done.

**id**

[ID](#id)!

**inScopeOf**

[[ID](#id)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**note**

[String](#string)

A textual description or comment.

**provider**

[ID](#id)

(Agent) The economic agent from whom the claim is initiated.

**receiver**

[ID](#id)

(Agent) The economic agent whom the claim is for.

**resourceClassifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**resourceConformsTo**

[ID](#id)

(ResourceSpecification) The primary resource specification or definition of an existing or potential economic resource. A resource will have only one, as this specifies exactly what the resource is.

**resourceQuantity**

[IMeasure](#imeasure)

The amount and unit of the economic resource counted or inventoried.

**triggeredBy**

[ID](#id)

(EconomicEvent) The economic event which already occurred which this claim has been made against.

### CommitmentCreateParams

Field

Type

Description

**action**

[ID](#id)!

(Action) Relates a commitment to a verb, such as consume, produce, work, improve, etc.

**agreedIn**

[URI](#uri)

Reference to an agreement between agents which specifies the rules or policies or calculations which govern this commitment.

**atLocation**

[ID](#id)

(SpatialThing) The place where an commitment occurs. Usually mappable.

**clauseOf**

[ID](#id)

(Agreement) This commitment is part of the agreement.

**due**

[DateTime](#datetime)

The time something is expected to be complete.

**effortQuantity**

[IMeasure](#imeasure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**finished**

[Boolean](#boolean)

The commitment is complete or not. This is irrespective of if the original goal has been met, and indicates that no more will be done.

**hasBeginning**

[DateTime](#datetime)

The planned beginning of the commitment.

**hasEnd**

[DateTime](#datetime)

The planned end of the commitment.

**hasPointInTime**

[DateTime](#datetime)

The planned date/time for the commitment. Can be used instead of beginning and end.

**inScopeOf**

[[ID](#id)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**independentDemandOf**

[ID](#id)

(Plan) Represents a desired deliverable expected from this plan.

**inputOf**

[ID](#id)

(Process) Defines the process to which this commitment is an input.

**note**

[String](#string)

A textual description or comment.

**outputOf**

[ID](#id)

(Process) Defines the process for which this commitment is an output.

**provider**

[ID](#id)!

(Agent) The economic agent from whom the commitment is initiated.

**receiver**

[ID](#id)!

(Agent) The economic agent whom the commitment is for.

**resourceClassifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**resourceConformsTo**

[ID](#id)

(ResourceSpecification) The primary resource specification or definition of an existing or potential economic resource. A resource will have only one, as this specifies exactly what the resource is.

**resourceInventoriedAs**

[ID](#id)

(EconomicResource) Exact economic resource involved in the commitment.

**resourceQuantity**

[IMeasure](#imeasure)

The amount and unit of the economic resource counted or inventoried.

### CommitmentUpdateParams

Field

Type

Description

**agreedIn**

[URI](#uri)

Reference to an agreement between agents which specifies the rules or policies or calculations which govern this commitment.

**atLocation**

[ID](#id)

(SpatialThing) The place where an commitment occurs. Usually mappable.

**clauseOf**

[ID](#id)

(Agreement) This commitment is part of the agreement.

**due**

[DateTime](#datetime)

The time something is expected to be complete.

**effortQuantity**

[IMeasure](#imeasure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**finished**

[Boolean](#boolean)

The commitment is complete or not. This is irrespective of if the original goal has been met, and indicates that no more will be done.

**hasBeginning**

[DateTime](#datetime)

The planned beginning of the commitment.

**hasEnd**

[DateTime](#datetime)

The planned end of the commitment.

**hasPointInTime**

[DateTime](#datetime)

The planned date/time for the commitment. Can be used instead of beginning and end.

**id**

[ID](#id)!

**inScopeOf**

[[ID](#id)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**independentDemandOf**

[ID](#id)

(Plan) Represents a desired deliverable expected from this plan.

**inputOf**

[ID](#id)

(Process) Defines the process to which this commitment is an input.

**note**

[String](#string)

A textual description or comment.

**outputOf**

[ID](#id)

(Process) Defines the process for which this commitment is an output.

**provider**

[ID](#id)

(Agent) The economic agent from whom the commitment is initiated.

**receiver**

[ID](#id)

(Agent) The economic agent whom the commitment is for.

**resourceClassifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**resourceConformsTo**

[ID](#id)

(ResourceSpecification) The primary resource specification or definition of an existing or potential economic resource. A resource will have only one, as this specifies exactly what the resource is.

**resourceInventoriedAs**

[ID](#id)

(EconomicResource) Exact economic resource involved in the commitment.

**resourceQuantity**

[IMeasure](#imeasure)

The amount and unit of the economic resource counted or inventoried.

### EconomicEventCreateParams

Field

Type

Description

**action**

[ID](#id)!

(Action) Relates an economic event to a verb, such as consume, produce, work, improve, etc.

**agreedIn**

[URI](#uri)

Reference to an agreement between agents which specifies the rules or policies or calculations which govern this economic event.

**atLocation**

[ID](#id)

(SpatialThing) The place where an economic event occurs. Usually mappable.

**effortQuantity**

[IMeasure](#imeasure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**hasBeginning**

[DateTime](#datetime)

The beginning of the economic event.

**hasEnd**

[DateTime](#datetime)

The end of the economic event.

**hasPointInTime**

[DateTime](#datetime)

The date/time at which the economic event occurred. Can be used instead of beginning and end.

**inScopeOf**

[[ID](#id)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**inputOf**

[ID](#id)

(Process) Defines the process to which this event is an input.

**note**

[String](#string)

A textual description or comment.

**outputOf**

[ID](#id)

(Process) Defines the process for which this event is an output.

**provider**

[ID](#id)

(Agent) The economic agent from whom the actual economic event is initiated.

**realizationOf**

[ID](#id)

(Agreement) This economic event occurs as part of this agreement.

**receiver**

[ID](#id)

(Agent) The economic agent whom the actual economic event is for.

**resourceClassifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**resourceConformsTo**

[ID](#id)

(ResourceSpecification) The primary resource specification or definition of an existing or potential economic resource. A resource will have only one, as this specifies exactly what the resource is.

**resourceInventoriedAs**

[ID](#id)

(EconomicResource) Economic resource involved in the economic event.

**resourceQuantity**

[IMeasure](#imeasure)

The amount and unit of the economic resource counted or inventoried. This is the quantity that could be used to increment or decrement a resource, depending on the type of resource and resource effect of action.

**tags**

[[ID](#id)!]

Tags/Categories in a taxonomy, linked to resourceClassifiedAs: References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**toResourceInventoriedAs**

[ID](#id)

(EconomicResource) Additional economic resource on the economic event when needed by the receiver. Used when a transfer or move, or sometimes other actions, requires explicitly identifying an economic resource on the receiving side.

**triggeredBy**

[ID](#id)

(EconomicEvent) References another economic event that implied this economic event, often based on a prior agreement.

### EconomicEventUpdateParams

Field

Type

Description

**agreedIn**

[URI](#uri)

Reference to an agreement between agents which specifies the rules or policies or calculations which govern this economic event.

**id**

[ID](#id)!

**inScopeOf**

[[ID](#id)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**note**

[String](#string)

A textual description or comment.

**realizationOf**

[ID](#id)

(Agreement) This economic event occurs as part of this agreement.

**triggeredBy**

[ID](#id)

(EconomicEvent) References another economic event that implied this economic event, often based on a prior agreement.

### EconomicResourceCreateParams

Input EconomicResource type used when sending events to setup initial resource recordings

Field

Type

Description

**conformsTo**

[ID](#id)

(ResourceSpecification) The primary resource specification or definition of an existing or potential economic resource. A resource will have only one, as this specifies exactly what the resource is.

**containedIn**

[ID](#id)

(EconomicResource) Used when a stock economic resource contains items also defined as economic resources.

**currentLocation**

[ID](#id)

(SpatialThing) The current place an economic resource is located. Could be at any level of granularity, from a town to an address to a warehouse location. Usually mappable.

**image**

[URI](#uri)

The uri to an image relevant to the resource, such as a photo, diagram, etc.

**lot**

[ID](#id)

(ProductBatch) Lot or batch of an economic resource, used to track forward or backwards to all occurrences of resources of that lot. Note more than one resource can be of the same lot.

**name**

[String](#string)

An informal or formal textual identifier for an item. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**tags**

[[ID](#id)!]

Tags/Categories in a taxonomy, linked to resourceClassifiedAs: References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**trackingIdentifier**

[String](#string)

Sometimes called serial number, used when each item must have a traceable identifier (like a computer). Could also be used for other unique tracking identifiers needed for resources.

### EconomicResourceUpdateParams

Field

Type

Description

**classifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**containedIn**

[ID](#id)

(EconomicResource) Used when a stock economic resource contains items also defined as economic resources.

**id**

[ID](#id)!

**image**

[URI](#uri)

The uri to an image relevant to the resource, such as a photo, diagram, etc.

**note**

[String](#string)

A textual description or comment.

**unitOfEffort**

[ID](#id)

(Unit) The unit used for use or work or cite actions for this resource.

### FeedFilters

Field

Type

Description

**feedName**

[String](#string)

### FulfillmentCreateParams

Field

Type

Description

**effortQuantity**

[IMeasure](#imeasure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**fulfilledBy**

[ID](#id)!

(EconomicEvent) The economic event which completely or partially fulfills a commitment.

**fulfills**

[ID](#id)!

(Commitment) The commitment which is completely or partially fulfilled by an economic event.

**note**

[String](#string)

A textual description or comment.

**resourceQuantity**

[IMeasure](#imeasure)

The amount and unit of the economic resource counted or inventoried.

### FulfillmentUpdateParams

Field

Type

Description

**effortQuantity**

[IMeasure](#imeasure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**fulfilledBy**

[ID](#id)

(EconomicEvent) The economic event which completely or partially fulfills a commitment.

**fulfills**

[ID](#id)

(Commitment) The commitment which is completely or partially fulfilled by an economic event.

**id**

[ID](#id)!

**note**

[String](#string)

A textual description or comment.

**resourceQuantity**

[IMeasure](#imeasure)

The amount and unit of the economic resource counted or inventoried.

### GeolocationDistance

Field

Type

Description

**meters**

[Int](#int)

### GeolocationFilters

Field

Type

Description

**distance**

[GeolocationDistance](#geolocationdistance)

**nearAddress**

[String](#string)

**nearPoint**

[GeolocationPoint](#geolocationpoint)

### GeolocationPoint

Field

Type

Description

**lat**

[Float](#float)

**long**

[Float](#float)

### IDuration

Mutation input structure for defining time durations.

Field

Type

Description

**numericDuration**

[Float](#float)!

A number representing the duration, will be paired with a unit.

**unitType**

[TimeUnit](#timeunit)!

A unit of measure.

### IMeasure

Mutation input structure for defining measurements. Should be nulled if not present, rather than empty.

Field

Type

Description

**hasNumericalValue**

[Float](#float)!

A number representing the quantity, will be paired with a unit.

**hasUnit**

[ID](#id)!

(Unit) A unit of measure.

### IntentCreateParams

Field

Type

Description

**action**

[String](#string)!

(Action) Relates an intent to a verb, such as consume, produce, work, improve, etc.

**agreedIn**

[URI](#uri)

Reference to an agreement between agents which specifies the rules or policies or calculations which govern this intent.

**atLocation**

[ID](#id)

(SpatialThing) The place where an intent occurs. Usually mappable.

**availableQuantity**

[IMeasure](#imeasure)

The total quantity of the offered resource available.

**due**

[DateTime](#datetime)

The time something is expected to be complete.

**effortQuantity**

[IMeasure](#imeasure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**finished**

[Boolean](#boolean)

The intent is complete or not. This is irrespective of if the original goal has been met, and indicates that no more will be done.

**hasBeginning**

[DateTime](#datetime)

The planned beginning of the intent.

**hasEnd**

[DateTime](#datetime)

The planned end of the intent.

**hasPointInTime**

[DateTime](#datetime)

The planned date/time for the intent. Can be used instead of beginning and end.

**image**

[URI](#uri)

The uri to an image relevant to the intent, such as a photo.

**inScopeOf**

[[ID](#id)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**inputOf**

[ID](#id)

(Process) Defines the process to which this intent is an input.

**name**

[String](#string)

An informal or formal textual identifier for an intent. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**outputOf**

[ID](#id)

(Process) Defines the process to which this intent is an output.

**provider**

[ID](#id)

(Agent) The economic agent from whom the intent is initiated. This implies that the intent is an offer.

**receiver**

[ID](#id)

(Agent) The economic agent whom the intent is for. This implies that the intent is a request.

**resourceClassifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**resourceConformsTo**

[ID](#id)

(ResourceSpecification) The primary resource specification or definition of an existing or potential economic resource. A resource will have only one, as this specifies exactly what the resource is.

**resourceInventoriedAs**

[ID](#id)

(EconomicResource) When a specific EconomicResource is known which can service the Intent, this defines that resource.

**resourceQuantity**

[IMeasure](#imeasure)

The amount and unit of the economic resource counted or inventoried. This is the quantity that could be used to increment or decrement a resource, depending on the type of resource and resource effect of action.

**tags**

[[ID](#id)!]

Tags/Categories in a taxonomy, linked to resourceClassifiedAs: References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

### IntentSearchParams

Query parameters for reading Intents related to an Agent

Field

Type

Description

**action**

[[ID](#id)]

**agent**

[[ID](#id)]

**atLocation**

[[ID](#id)]

**classifiedAs**

[[URI](#uri)]

**endDate**

[DateTime](#datetime)

**finished**

[Boolean](#boolean)

**geolocation**

[GeolocationFilters](#geolocationfilters)

**inScopeOf**

[[ID](#id)]

**provider**

[[ID](#id)]

**receiver**

[[ID](#id)]

**searchString**

[String](#string)

**startDate**

[DateTime](#datetime)

**status**

[String](#string)

**tagIds**

[[ID](#id)]

### IntentUpdateParams

Field

Type

Description

**action**

[String](#string)

(Action) Relates an intent to a verb, such as consume, produce, work, improve, etc.

**agreedIn**

[URI](#uri)

Reference to an agreement between agents which specifies the rules or policies or calculations which govern this intent.

**atLocation**

[ID](#id)

(SpatialThing) The place where an intent occurs. Usually mappable.

**availableQuantity**

[IMeasure](#imeasure)

The total quantity of the offered resource available.

**due**

[DateTime](#datetime)

The time something is expected to be complete.

**effortQuantity**

[IMeasure](#imeasure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**finished**

[Boolean](#boolean)

The intent is complete or not. This is irrespective of if the original goal has been met, and indicates that no more will be done.

**hasBeginning**

[DateTime](#datetime)

The planned beginning of the intent.

**hasEnd**

[DateTime](#datetime)

The planned end of the intent.

**hasPointInTime**

[DateTime](#datetime)

The planned date/time for the intent. Can be used instead of beginning and end.

**id**

[ID](#id)!

**image**

[URI](#uri)

The uri to an image relevant to the intent, such as a photo.

**inScopeOf**

[[ID](#id)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**inputOf**

[ID](#id)

(Process) Defines the process to which this intent is an input.

**name**

[String](#string)

An informal or formal textual identifier for an intent. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**outputOf**

[ID](#id)

(Process) Defines the process to which this intent is an output.

**provider**

[ID](#id)

(Agent) The economic agent from whom the intent is initiated. This implies that the intent is an offer.

**receiver**

[ID](#id)

(Agent) The economic agent whom the intent is for. This implies that the intent is a request.

**resourceClassifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**resourceConformsTo**

[ID](#id)

(ResourceSpecification) The primary resource specification or definition of an existing or potential economic resource. A resource will have only one, as this specifies exactly what the resource is.

**resourceInventoriedAs**

[ID](#id)

(EconomicResource) When a specific EconomicResource is known which can service the Intent, this defines that resource.

**resourceQuantity**

[IMeasure](#imeasure)

The amount and unit of the economic resource counted or inventoried. This is the quantity that could be used to increment or decrement a resource, depending on the type of resource and resource effect of action.

### ObservablePhenomenonInputParams

Possible qualitative assessment of an ObservableProperty. (eg. property “contamination” may have phenomenon like “high”, “some”, “none”)

Field

Type

Description

**choiceOf**

[ID](#id)!

What observable property does this assessment apply to?

**formulaQuantifier**

[Float](#float)

A numerical representation of this phenomenon, to be used when automatic analysis is needed (like value calculation formulas). For example, a series of phenomenon of high, medium, low, or none could be assigned formula quantifiers of 100, 50, 10, or 0.

**id**

[ID](#id)

**label**

[String](#string)!

A name for this phenomenon (eg. high, ripe, organic). Unique to each ObservableProperty.

**note**

[String](#string)

A textual description or comment.

### ObservablePropertyInputParams

Types of things that can be observed or measured as part of Observation.

Field

Type

Description

**id**

[ID](#id)

**label**

[String](#string)!

A name for something that can be observed (eg, temperature, weight, contamination…)

**note**

[String](#string)

A textual description or comment.

### ObservationInputParams

Field

Type

Description

**atLocation**

[ID](#id)

(SpatialThing) The place where an observation occured. Usually mappable.

**hasFeatureOfInterest**

[ID](#id)!

(EconomicResource or Agent) Thing that was observed

**id**

[ID](#id)

**inScopeOf**

[[ID](#id)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**madeBySensor**

[ID](#id)

(Person or EconomicResource or ResourceSpecification) The person or machine or sensor who actually conducted the observation

**note**

[String](#string)

A textual description or comment.

**observedDuring**

[ID](#id)

(Process) Optionally defines the economic process during which this event occured

**observedProperty**

[ID](#id)!

(ObservableProperty) Type of measurement (eg, temperature, weight…).

**provider**

[ID](#id)

(Person or Organization) The agent who is providing the observation

**resultMeasure**

[IMeasure](#imeasure)

Alternatively to resultPhenomenon: Unit and measurement of what was observed (only in the case of quantitative measurements)

**resultPhenomenon**

[ID](#id)

Alternatively to resultMeasure: (ObservablePhenomenon) Name and other information about what was observed (only in the case of qualitative measurements)

**resultTime**

[DateTime](#datetime)

The date and time at which the observation occurred.

### Paginate

Field

Type

Description

**after**

[[Cursor](#cursor)!]

**before**

[[Cursor](#cursor)!]

**limit**

[Int](#int)

### PlanCreateParams

Field

Type

Description

**created**

[DateTime](#datetime)

The time the plan was made.

**due**

[DateTime](#datetime)

The time the plan is expected to be complete.

**name**

[String](#string)!

An informal or formal textual identifier for a plan. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**refinementOf**

[ID](#id)

(Scenario) This plan refines a scenario, making it operational.

### PlanUpdateParams

Field

Type

Description

**created**

[DateTime](#datetime)

The time the plan was made.

**due**

[DateTime](#datetime)

The time the plan is expected to be complete.

**id**

[ID](#id)!

**name**

[String](#string)

An informal or formal textual identifier for a plan. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**refinementOf**

[ID](#id)

(Scenario) This plan refines a scenario, making it operational.

### PostContentInput

Field

Type

Description

**htmlBody**

[String](#string)

**summary**

[String](#string)

**title**

[String](#string)

### PostFilters

Field

Type

Description

**id**

[ID](#id)

### ProcessCreateParams

Field

Type

Description

**basedOn**

[ID](#id)

(ProcessSpecification) The definition or specification for a process.

**classifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**finished**

[Boolean](#boolean)

The process is complete or not. This is irrespective of if the original goal has been met, and indicates that no more will be done.

**hasBeginning**

[DateTime](#datetime)

The planned beginning of the process.

**hasEnd**

[DateTime](#datetime)

The planned end of the process.

**inScopeOf**

[[ID](#id)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**name**

[String](#string)!

An informal or formal textual identifier for a process. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**plannedWithin**

[ID](#id)

(Plan) The process with its inputs and outputs is part of the plan.

**tags**

[[ID](#id)!]

Tags/Categories in a taxonomy, linked to resourceClassifiedAs: References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

### ProcessSpecificationCreateParams

Field

Type

Description

**name**

[String](#string)!

An informal or formal textual identifier for the process. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

### ProcessSpecificationUpdateParams

Field

Type

Description

**id**

[ID](#id)!

**name**

[String](#string)

An informal or formal textual identifier for the process. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

### ProcessUpdateParams

Field

Type

Description

**basedOn**

[ID](#id)

(ProcessSpecification) The definition or specification for a process.

**classifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**finished**

[Boolean](#boolean)

The process is complete or not. This is irrespective of if the original goal has been met, and indicates that no more will be done.

**hasBeginning**

[DateTime](#datetime)

The planned beginning of the process.

**hasEnd**

[DateTime](#datetime)

The planned end of the process.

**id**

[ID](#id)!

**inScopeOf**

[[ID](#id)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**name**

[String](#string)

An informal or formal textual identifier for a process. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**plannedWithin**

[ID](#id)

(Plan) The process with its inputs and outputs is part of the plan.

### ProductBatchCreateParams

Field

Type

Description

**batchNumber**

[String](#string)!

The standard unique identifier of the batch.

**expiryDate**

[DateTime](#datetime)

Expiration date of the batch, commonly used for food.

**productionDate**

[DateTime](#datetime)

Date the batch was produced. Can be derived from the economic event of production.

### ProductBatchUpdateParams

Field

Type

Description

**batchNumber**

[String](#string)

The standard unique identifier of the batch.

**expiryDate**

[DateTime](#datetime)

Expiration date of the batch, commonly used for food.

**id**

[ID](#id)!

**productionDate**

[DateTime](#datetime)

Date the batch was produced. Can be derived from the economic event of production.

### ProfileInput

Field

Type

Description

**name**

[String](#string)

**summary**

[String](#string)

### ProposalCreateParams

Field

Type

Description

**created**

[DateTime](#datetime)

The date and time the proposal was created.

**eligibleLocation**

[ID](#id)

(SpatialThing) The location at which this proposal is eligible.

**hasBeginning**

[DateTime](#datetime)

The beginning time of proposal publication.

**hasEnd**

[DateTime](#datetime)

The end time of proposal publication.

**inScopeOf**

[[ID](#id)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**name**

[String](#string)

An informal or formal textual identifier for a proposal. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**unitBased**

[Boolean](#boolean)

This proposal contains unit based quantities, which can be multipied to create commitments; commonly seen in a price list or e-commerce.

### ProposalUpdateParams

Field

Type

Description

**eligibleLocation**

[ID](#id)

(SpatialThing) The location at which this proposal is eligible.

**hasBeginning**

[DateTime](#datetime)

The beginning date/time of proposal publication.

**hasEnd**

[DateTime](#datetime)

The end time of proposal publication.

**id**

[ID](#id)!

**inScopeOf**

[[ID](#id)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**name**

[String](#string)

An informal or formal textual identifier for a proposal. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**unitBased**

[Boolean](#boolean)

This proposal contains unit based quantities, which can be multipied to create commitments; commonly seen in a price list or e-commerce.

### RecipeExchangeCreateParams

Field

Type

Description

**name**

[String](#string)!

An informal or formal textual identifier for a recipe exchange. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

### RecipeExchangeUpdateParams

Field

Type

Description

**id**

[ID](#id)!

**name**

[String](#string)

An informal or formal textual identifier for a recipe exchange. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

### RecipeFlowCreateParams

Field

Type

Description

**action**

[ID](#id)!

(Action) Relates a process input or output to a verb, such as consume, produce, work, modify, etc.

**effortQuantity**

[IMeasure](#imeasure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**note**

[String](#string)

A textual description or comment.

**recipeClauseOf**

[ID](#id)

(RecipeExchange) Relates a flow to its exchange agreement in a recipe.

**recipeFlowResource**

[ID](#id)!

(RecipeResource) The resource definition referenced by this flow in the recipe.

**recipeInputOf**

[ID](#id)

(RecipeProcess) Relates an input flow to its process in a recipe.

**recipeOutputOf**

[ID](#id)

(RecipeProcess) Relates an output flow to its process in a recipe.

**resourceQuantity**

[IMeasure](#imeasure)

The amount and unit of the economic resource counted or inventoried.

**stage**

[ID](#id)

(ProcessSpecification) References the ProcessSpecification of the last process the economic resource went through. Stage is used when the last process is important for finding proper resources, such as where the publishing process wants only documents that have gone through the editing process.

**state**

[String](#string)

The state of the desired economic resource (pass or fail), after coming out of a test or review process.

### RecipeFlowUpdateParams

Field

Type

Description

**action**

[ID](#id)

(Action) Relates a process input or output to a verb, such as consume, produce, work, modify, etc.

**effortQuantity**

[IMeasure](#imeasure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**id**

[ID](#id)!

**note**

[String](#string)

A textual description or comment.

**recipeFlowResource**

[ID](#id)

(RecipeResource) The resource definition referenced by this flow in the recipe.

**recipeInputOf**

[ID](#id)

(RecipeProcess) Relates an input flow to its process in a recipe.

**recipeOutputOf**

[ID](#id)

(RecipeProcess) Relates an output flow to its process in a recipe.

**resourceQuantity**

[IMeasure](#imeasure)

The amount and unit of the economic resource counted or inventoried.

**stage**

[ID](#id)

(ProcessSpecification) References the ProcessSpecification of the last process the economic resource went through. Stage is used when the last process is important for finding proper resources, such as where the publishing process wants only documents that have gone through the editing process.

**state**

[String](#string)

The state of the desired economic resource (pass or fail), after coming out of a test or review process.

### RecipeProcessCreateParams

Field

Type

Description

**hasDuration**

[IDuration](#iduration)

The planned calendar duration of the process as defined for the recipe batch.

**name**

[String](#string)!

An informal or formal textual identifier for a recipe process. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**processClassifiedAs**

[[URI](#uri)!]

References a concept in a common taxonomy or other classification scheme for purposes of categorization.

**processConformsTo**

[ID](#id)!

(ProcessSpecification) The standard specification or definition of a process.

### RecipeProcessUpdateParams

Field

Type

Description

**hasDuration**

[IDuration](#iduration)

The planned calendar duration of the process as defined for the recipe batch.

**id**

[ID](#id)!

**name**

[String](#string)

An informal or formal textual identifier for a recipe process. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**processClassifiedAs**

[[URI](#uri)!]

References a concept in a common taxonomy or other classification scheme for purposes of categorization.

**processConformsTo**

[ID](#id)!

(ProcessSpecification) The standard specification or definition of a process.

### RecipeResourceCreateParams

Field

Type

Description

**image**

[URI](#uri)

The uri to an image relevant to the entity, such as a photo, diagram, etc.

**name**

[String](#string)!

An informal or formal textual identifier for a recipe resource. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**resourceClassifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**resourceConformsTo**

[ID](#id)

(ResourceSpecification) The primary resource specification or definition of an existing or potential economic resource. A resource will have only one, as this specifies exactly what the resource is.

**substitutable**

[Boolean](#boolean)

Defines if any resource of that type can be freely substituted for any other resource of that type when used, consumed, traded, etc.

**unitOfEffort**

[ID](#id)

(Unit) The unit used for use action on this resource or work action in the recipe.

**unitOfResource**

[ID](#id)

(Unit) The unit of inventory used for this resource in the recipe.

### RecipeResourceUpdateParams

Field

Type

Description

**id**

[ID](#id)!

**image**

[URI](#uri)

The uri to an image relevant to the entity, such as a photo, diagram, etc.

**name**

[String](#string)

An informal or formal textual identifier for a recipe resource. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**resourceClassifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**resourceConformsTo**

[ID](#id)

(ResourceSpecification) The primary resource specification or definition of an existing or potential economic resource. A resource will have only one, as this specifies exactly what the resource is.

**substitutable**

[Boolean](#boolean)

Defines if any resource of that type can be freely substituted for any other resource of that type when used, consumed, traded, etc.

**unitOfEffort**

[ID](#id)

(Unit) The unit used for use action on this resource or work action in the recipe.

**unitOfResource**

[ID](#id)

(Unit) The unit of inventory used for this resource in the recipe.

### ResourceSpecificationCreateParams

Field

Type

Description

**defaultUnitOfEffort**

[ID](#id)

(Unit) The default unit used for use or work.

**defaultUnitOfResource**

[ID](#id)

(Unit) The default unit used for the resource itself.

**image**

[URI](#uri)

The uri to an image relevant to the entity, such as a photo, diagram, etc.

**name**

[String](#string)!

An informal or formal textual identifier for a type of resource. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**resourceClassifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**tags**

[[ID](#id)!]

Tags/Categories in a taxonomy, linked to resourceClassifiedAs: References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

### ResourceSpecificationUpdateParams

Field

Type

Description

**defaultUnitOfEffort**

[ID](#id)

(Unit) The default unit used for use or work.

**defaultUnitOfResource**

[ID](#id)

(Unit) The default unit used for the resource itself.

**id**

[ID](#id)!

**image**

[URI](#uri)

The uri to an image relevant to the entity, such as a photo, diagram, etc.

**name**

[String](#string)

An informal or formal textual identifier for a type of resource. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**resourceClassifiedAs**

[[URI](#uri)!]

References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

**tags**

[[ID](#id)!]

Tags/Categories in a taxonomy, linked to resourceClassifiedAs: References one or more concepts in a common taxonomy or other classification scheme for purposes of categorization or grouping.

### SatisfactionCreateParams

Field

Type

Description

**effortQuantity**

[IMeasure](#imeasure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**note**

[String](#string)

A textual description or comment.

**resourceQuantity**

[IMeasure](#imeasure)

The amount and unit of the economic resource counted or inventoried.

**satisfiedBy**

[ID](#id)!

(Commitment|EconomicEvent) A commitment or economic event fully or partially satisfying an intent.

**satisfies**

[ID](#id)!

(Intent) An intent satisfied fully or partially by an economic event or commitment.

### SatisfactionUpdateParams

Field

Type

Description

**effortQuantity**

[IMeasure](#imeasure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**id**

[ID](#id)!

**note**

[String](#string)

A textual description or comment.

**resourceQuantity**

[IMeasure](#imeasure)

The amount and unit of the economic resource counted or inventoried.

**satisfiedBy**

[ID](#id)

(Commitment|EconomicEvent) A commitment or economic event fully or partially satisfying an intent.

**satisfies**

[ID](#id)

(Intent) An intent satisfied fully or partially by an economic event or commitment.

### ScenarioCreateParams

Field

Type

Description

**definedAs**

[ID](#id)!

(ScenarioDefinition) The scenario definition for this scenario, for example yearly budget.

**hasBeginning**

[DateTime](#datetime)

The beginning date/time of the scenario, often the beginning of an accounting period.

**hasEnd**

[DateTime](#datetime)

The ending date/time of the scenario, often the end of an accounting period.

**inScopeOf**

[[ID](#id)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**name**

[String](#string)!

An informal or formal textual identifier for a scenario. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**refinementOf**

[ID](#id)

(Scenario) This scenario refines another scenario, often as time moves closer or for more detail.

### ScenarioDefinitionCreateParams

Field

Type

Description

**hasDuration**

[IDuration](#iduration)

The duration of the scenario, often an accounting period.

**name**

[String](#string)

An informal or formal textual identifier for a scenario definition. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

### ScenarioDefinitionUpdateParams

Field

Type

Description

**hasDuration**

[IDuration](#iduration)

The duration of the scenario, often an accounting period.

**id**

[ID](#id)!

**name**

[String](#string)!

An informal or formal textual identifier for a scenario definition. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

### ScenarioUpdateParams

Field

Type

Description

**definedAs**

[ID](#id)!

(ScenarioDefinition) The scenario definition for this scenario, for example yearly budget.

**hasBeginning**

[DateTime](#datetime)

The beginning date/time of the scenario, often the beginning of an accounting period.

**hasEnd**

[DateTime](#datetime)

The ending date/time of the scenario, often the end of an accounting period.

**id**

[ID](#id)!

**inScopeOf**

[[ID](#id)!]

Grouping around something to create a boundary or context, used for documenting, accounting, planning.

**name**

[String](#string)

An informal or formal textual identifier for a scenario. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**refinementOf**

[ID](#id)

(Scenario) This scenario refines another scenario, often as time moves closer or for more detail.

### SettlementCreateParams

Field

Type

Description

**effortQuantity**

[IMeasure](#imeasure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**note**

[String](#string)

A textual description or comment.

**resourceQuantity**

[IMeasure](#imeasure)

The amount and unit of the economic resource counted or inventoried.

**settledBy**

[ID](#id)!

(EconomicEvent) The economic event fully or partially settling a claim.

**settles**

[ID](#id)!

(Claim) A claim which is fully or partially settled by an economic event.

### SettlementUpdateParams

Field

Type

Description

**effortQuantity**

[IMeasure](#imeasure)

The amount and unit of the work or use or citation effort-based action. This is often a time duration, but also could be cycle counts or other measures of effort or usefulness.

**id**

[ID](#id)!

**note**

[String](#string)

A textual description or comment.

**resourceQuantity**

[IMeasure](#imeasure)

The amount and unit of the economic resource counted or inventoried.

**settledBy**

[ID](#id)

(EconomicEvent) The economic event fully or partially settling a claim.

**settles**

[ID](#id)

(Claim) A claim which is fully or partially settled by an economic event.

### SpatialThingCreateParams

Field

Type

Description

**alt**

[Float](#float)

Altitude.

**lat**

[Float](#float)

Latitude.

**long**

[Float](#float)

Longitude.

**mappableAddress**

[String](#string)

An address that will be recognized as mappable by mapping software.

**name**

[String](#string)!

An informal or formal textual identifier for a location. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

### SpatialThingUpdateParams

Field

Type

Description

**alt**

[Float](#float)

Altitude.

**id**

[ID](#id)!

**lat**

[Float](#float)

Latitude.

**long**

[Float](#float)

Longitude.

**mappableAddress**

[String](#string)

An address that will be recognized as mappable by mapping software.

**name**

[String](#string)

An informal or formal textual identifier for a location. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

### UnitCreateParams

Field

Type

Description

**inScopeOf**

[ID](#id)

**label**

[String](#string)!

A human readable label for the unit, can be language specific.

**symbol**

[String](#string)!

A standard display symbol for a unit of measure.

### UnitUpdateParams

Field

Type

Description

**id**

[ID](#id)!

The primary key of the unit to update.

**label**

[String](#string)

A human readable label for the unit, can be language specific.

**symbol**

[String](#string)

A standard display symbol for a unit of measure.

### ValueCalculationCreateParams

Field

Type

Description

**action**

[ID](#id)!

**formula**

[String](#string)!

**inScopeOf**

[[ID](#id)!]

**name**

[String](#string)

**note**

[String](#string)

**resourceClassifiedAs**

[[URI](#uri)!]

**resourceConformsTo**

[ID](#id)

**valueAction**

[ID](#id)!

**valueResourceConformsTo**

[ID](#id)

**valueUnit**

[ID](#id)!

### ValueCalculationUpdateParams

Field

Type

Description

**action**

[ID](#id)

**formula**

[String](#string)

**id**

[ID](#id)!

**inScopeOf**

[[ID](#id)!]

**name**

[String](#string)

**note**

[String](#string)

**resourceClassifiedAs**

[[URI](#uri)!]

**resourceConformsTo**

[ID](#id)

**valueAction**

[ID](#id)

**valueResourceConformsTo**

[ID](#id)

**valueUnit**

[ID](#id)

### agentCommitmentSearchParams

Query parameters for reading Commitments related to an Agent

Field

Type

Description

**action**

[ID](#id)

**endDate**

[DateTime](#datetime)

**finished**

[Boolean](#boolean)

**searchString**

[String](#string)

**startDate**

[DateTime](#datetime)

### agentEventSearchParams

Query parameters for reading EconomicEvents related to an Agent

Field

Type

Description

**action**

[ID](#id)

**endDate**

[DateTime](#datetime)

**searchString**

[String](#string)

**startDate**

[DateTime](#datetime)

### agentPlanSearchParams

Query parameters for reading Plans related to an Agent

Field

Type

Description

**finished**

[Boolean](#boolean)

**searchString**

[String](#string)

### agentProcessSearchParams

Query parameters for reading Processes related to an Agent

Field

Type

Description

**finished**

[Boolean](#boolean)

**searchString**

[String](#string)

### agentResourceSearchParams

Query parameters for reading EconomicResources related to an Agent

Field

Type

Description

**page**

[Int](#int)

**resourceClassification**

[URI](#uri)

**searchString**

[String](#string)

### planProcessSearchParams

Query parameters for reading Processes related to a Plan

Field

Type

Description

**after**

[DateTime](#datetime)

**before**

[DateTime](#datetime)

**finished**

[Boolean](#boolean)

**searchString**

[String](#string)

## Enums

### AgentType

Value

Description

**Organization**

**Person**

### TimeUnit

Defines the unit of time measured in a temporal Duration.

Value

Description

**day**

**hour**

**minute**

**month**

**second**

**week**

**year**

## Scalars

### Boolean

The Boolean scalar type represents true or false.

### Cursor

An opaque position marker for pagination. Paginated queries return a PageInfo struct with start and end cursors (which are actually lists of Cursor for …reasons…). You can then issue queries requesting results before the start or after the end cursors to request the previous or next page respectively.

Is actually a string or integer, typically an ID. Can also be include encoded data describing how a query is ordered. May be extended in future.

### DateTime

The DateTime scalar type represents a date and time in the UTC timezone. The DateTime appears in a JSON response as an ISO8601 formatted string, including UTC timezone (“Z”). The parsed date and time string will be converted to UTC if there is an offset.

### Float

The Float scalar type represents signed double-precision fractional values as specified by [IEEE 754](http://en.wikipedia.org/wiki/IEEE_floating_point).

### ID

The ID scalar type represents a unique identifier, often used to refetch an object or as key for a cache. The ID type appears in a JSON response as a String; however, it is not intended to be human-readable. When expected as an input type, any string (such as "4") or integer (such as 4) input value will be accepted as an ID.

### Int

The Int scalar type represents non-fractional signed whole numeric values. Int can represent values between -(2^53 - 1) and 2^53 - 1 since it is represented in JSON as double-precision floating point numbers specified by [IEEE 754](http://en.wikipedia.org/wiki/IEEE_floating_point).

### Json

Arbitrary json stored as a string

### String

The String scalar type represents textual data, represented as UTF-8 character sequences. The String type is most often used by GraphQL to represent free-form human-readable text.

### URI

The URI type simply declares a reference to an external web URL, Holochain entry or other resource.

## Interfaces

### Agent

A person or group or organization with economic agency.

Field

Argument

Type

Description

**agentType**

[AgentType](#agenttype)

**canonicalUrl**

[String](#string)

**commitments**

[[Commitment](#commitment)!]

filter

[agentCommitmentSearchParams](#agentcommitmentsearchparams)

**displayUsername**

[String](#string)

**economicEvents**

[[EconomicEvent](#economicevent)!]

filter

[agentEventSearchParams](#agenteventsearchparams)

**id**

[ID](#id)!

**image**

[URI](#uri)

The uri to an image relevant to the agent, such as a logo, avatar, photo, etc.

**intents**

[[Intent](#intent)!]

filter

[IntentSearchParams](#intentsearchparams)

**inventoriedEconomicResources**

[[EconomicResource](#economicresource)!]

filter

[agentResourceSearchParams](#agentresourcesearchparams)

**name**

[String](#string)!

An informal or formal textual identifier for an agent. Does not imply uniqueness.

**note**

[String](#string)

A textual description or comment.

**plans**

[[Plan](#plan)!]

filter

[agentPlanSearchParams](#agentplansearchparams)

**primaryLocation**

[SpatialThing](#spatialthing)

The main place an agent is located, often an address where activities occur and mail can be sent. This is usually a mappable geographic location. It also could be a website address, as in the case of agents who have no physical location.

**processes**

[[Process](#process)!]

filter

[agentProcessSearchParams](#agentprocesssearchparams)

**proposals**

[[Proposal](#proposal)!]

**relationships**

[[AgentRelationship](#agentrelationship)!]

roleId

[ID](#id)

**relationshipsAsObject**

[[AgentRelationship](#agentrelationship)!]

roleId

[ID](#id)

**relationshipsAsSubject**

[[AgentRelationship](#agentrelationship)!]

roleId

[ID](#id)

**roles**

[[AgentRelationshipRole](#agentrelationshiprole)!]

## Unions

### AccountingScope

A boundary or context grouped around some other record- used for documenting, accounting, planning. ## extended for Bonfire (default was Person | Organization)

Type

Description

[**Category**](#category)

A category (eg. tag in a taxonomy)

[**Organization**](#organization)

A formal or informal group, or legal organization.

[**Person**](#person)

A natural person.

[**Tag**](#tag)

A tag could be a category or hashtag or user or community or etc

### AnyCharacter

Any type of character (eg. Category, Thread, Geolocation, etc), actor (eg. User/Person), or agent (eg. Organisation)

Type

Description

[**Category**](#category)

A category (eg. tag in a taxonomy)

[**SpatialThing**](#spatialthing)

A physical mappable location.

[**User**](#user)

### AnyContext

Any type of known object

Type

Description

[**Activity**](#activity)

[**Category**](#category)

A category (eg. tag in a taxonomy)

[**EconomicEvent**](#economicevent)

An observed economic flow, as opposed to a flow planned to happen in the future. This could reflect a change in the quantity of an economic resource. It is also defined by its behavior in relation to the economic resource (see Action)

[**Follow**](#follow)

[**Intent**](#intent)

A planned economic flow which has not been committed to, which can lead to economic events (sometimes through commitments).

[**Post**](#post)

[**Process**](#process)

An activity that changes inputs into outputs. It could transform or transport economic resource(s).

[**SpatialThing**](#spatialthing)

A physical mappable location.

[**Tag**](#tag)

A tag could be a category or hashtag or user or community or etc

[**User**](#user)

### EventOrCommitment

Type

Description

[**Commitment**](#commitment)

A planned economic flow that has been promised by an agent to another agent.

[**EconomicEvent**](#economicevent)

An observed economic flow, as opposed to a flow planned to happen in the future. This could reflect a change in the quantity of an economic resource. It is also defined by its behavior in relation to the economic resource (see Action)

### ObservableObject

Things that can be observed.

Type

Description

[**EconomicResource**](#economicresource)

A resource which is useful to people or the ecosystem.

[**Organization**](#organization)

A formal or informal group, or legal organization.

[**Person**](#person)

A natural person.

### ObservableResult

Can contain either a unit+measure or a qualitative assessment.

Type

Description

[**Measure**](#measure)

Semantic meaning for measurements: binds a quantity to its measurement unit. See http://www.qudt.org/pages/QUDToverviewPage.html

[**ObservablePhenomenon**](#observablephenomenon)

Possible qualitative assessment of an ObservableProperty. (eg. property “contamination” may have phenomenon like “high”, “some”, “none”)

### Observer

Agent (usually a person) or machine like a sensor that conducts observations.

Type

Description

[**EconomicResource**](#economicresource)

A resource which is useful to people or the ecosystem.

[**Organization**](#organization)

A formal or informal group, or legal organization.

[**Person**](#person)

A natural person.

[**ResourceSpecification**](#resourcespecification)

Specification of a kind of resource. Could define a material item, service, digital item, currency account, etc. Used instead of a classification when more information is needed, particularly for recipes.

### ProductionFlowItem

Type

Description

[**EconomicEvent**](#economicevent)

An observed economic flow, as opposed to a flow planned to happen in the future. This could reflect a change in the quantity of an economic resource. It is also defined by its behavior in relation to the economic resource (see Action)

[**EconomicResource**](#economicresource)

A resource which is useful to people or the ecosystem.

[**Process**](#process)

An activity that changes inputs into outputs. It could transform or transport economic resource(s).