



ibexa

Summit 25

Collaboration: greater than the sum of the parts

MAREK NOCOŃ



About me



Marek Nocoń
Knowledge Team Leader
At **Ibexa** since 2017




Love **music**, **cats** and
Terry Pratchett's books

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Agenda

- 
1. The need of collaboration
 2. The collaboration package
 3. Demo
 4. Core concepts
 5. Extending
 6. Questions

Apollo 13 mission



Image: NASA



Houston, we have a problem





Okay, Houston...
we've had a problem here



The Mailbox

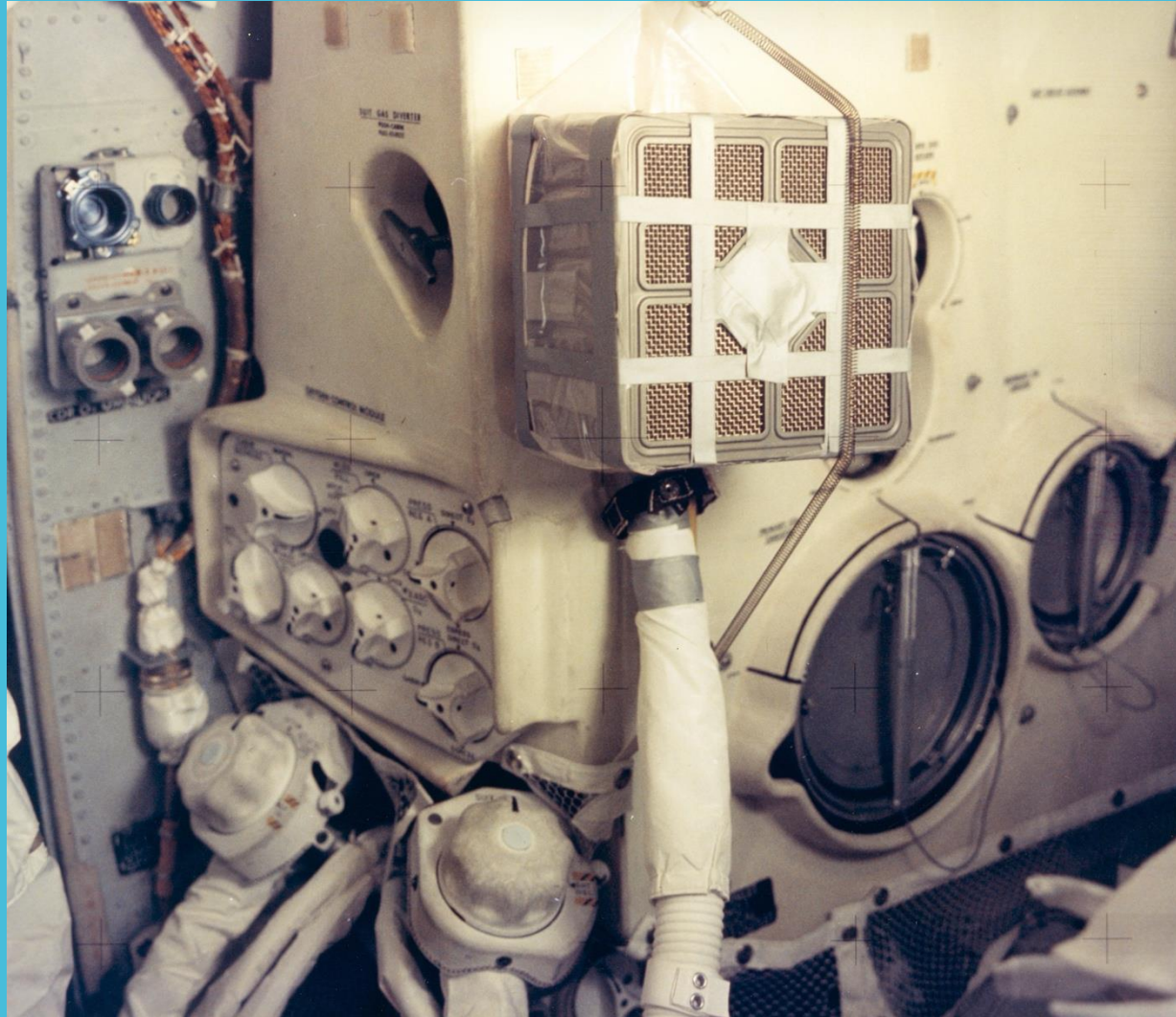


Image: NASA

42%

Office workers spend most of their time (42% on average) collaborating with others.

GLOBAL WORKPLACE SURVEY COMPARISON 2023
GENSLER RESEARCH INSTITUTE

Your feedback

1

A feature that is often requested by our clients to manage top-management approvals or reviews by 3rd party agencies.

2

This customer as well as others have requested a way to be able to share a link to a preview of a page / location without requiring the end user to be logged in.

3

Customer requested a way to do a shareable link for reviewers to access content without being Ibexa users. This would be something like a token for limited time similar to how one drive or google docs typically could work.



The Collaboration LTS update





The Collaboration LTS update

Coming soon!

- ▶ **Available as separate packages**
- ▶ **Available for Adobe DXP v4.6**
- ▶ **Editions: Headless, Experience, Commerce**
- ▶ **Brings two components:**
 - Real time editing in Online Editor
 - Content sharing with external users
- ▶ **In active development**
- ▶ **Planned release in Q1 2025**



Demo!




Behind the scenes




Real time editing







- ▶ Relies on Collaboration feature for CKEditor
- ▶ Supported only with Online Editor (RichText field type)
- ▶ Support for content items and products
- ▶ More details coming soon!









The screenshot shows a user editing a blog post titled "Innovative beauty". The interface includes a top bar with "Editing Blog post", "1 connected user (me)", a user profile picture, and a "Publish" button. Below the title is a "Share" button and a location field set to "Stories Translation: English (United Kingdom)". A rich text editor toolbar is visible, containing various icons for text formatting, alignment, and media insertion. The main text area contains a paragraph about mastering new technologies, with the phrase "It's an opportunity to reinvent our working methods" highlighted in blue. At the bottom of the editor, there is a "POWERED BY CKEditor" logo, a "paragraph" label, and a word/character count of "51 words 325 characters". A "Keywords" section below the editor shows three tags: "innovation", "digital", and "development". A "Distraction free mode" toggle is also present on the right side of the editor.



Editing Blog post | 1 connected user (me)  [Publish](#)


Innovative beauty

[Share](#) 
Location: Stories Translation: English (United Kingdom)


     

 Distraction free mode

At Helse, mastering new technologies is much more than a simple lever of competitiveness. **It's an opportunity to reinvent our working methods**, improve our products, and redefine the way we interact with our customers. With this approach, we are building the beauty of tomorrow today: innovative, connected, and deeply human.

POWERED BY  CKEditor

paragraph 51 words 325 characters

Keywords

innovation x digital x development x

Session

Managing sessions

- ▶ The `\Ibexa\Contracts\Collaboration\SessionServiceInterface` service
- ▶ `SessionServiceInterface::createSession(AbstractSessionCreateStruct $createStruct): SessionInterface;`
- ▶ `SessionServiceInterface::updateSession(SessionInterface $session, AbstractSessionUpdateStruct $updateStruct): SessionInterface;`
- ▶ `SessionServiceInterface::deleteSession(SessionInterface $session): void;`

Session

AbstractSessionCreateStruct

- ▶ SessionServiceToken (?string) – session identifier, default: generated randomly (UUIDv4)
- ▶ Owner (?Ibexa\Contracts\Core\Repository\Values\User\UserReference) – owner of the session, default: current user

Session

Finding sessions

- ▶ SessionServiceInterface:: getSession(int \$id): SessionInterface;
- ▶ SessionServiceInterface:: getSessionByToken(string \$token): SessionInterface;
- ▶ SessionServiceInterface:: findSessions(?SessionQuery \$query = null): SessionListInterface;

Session

Managing participants

- ▶ `SessionServiceInterface::addParticipant(SessionInterface $session, AbstractParticipantCreateStruct $createStruct): ParticipantInterface;`
- ▶ `SessionServiceInterface::updateParticipant(SessionInterface $session, ParticipantInterface $participant, AbstractParticipantUpdateStruct $updateStruct): ParticipantInterface;`
- ▶ `SessionServiceInterface::removeParticipant(SessionInterface $session, ParticipantInterface $participant): void;`

Session

Participants

- ▶ `SessionServiceInterface::addParticipant(SessionInterface $session, AbstractParticipantCreateStruct $createStruct): ParticipantInterface;`
 - ▶ Internal
 - ▶ External

Session

Determining ownership

▶ `SessionServiceInterface::isSessionOwner(SessionInterface $session, ?UserReference $user = null): bool;`

Session

Extensibility

Session events

- ▶ BeforeCreateSessionEvent
- ▶ BeforeDeleteSessionEvent
- ▶ BeforeUpdateSessionEvent
- ▶ CreateSessionEvent
- ▶ DeleteSessionEvent
- ▶ UpdateSessionEvent

Session

Extensibility

Participant events

- ▶ BeforeAddParticipantEvent
- ▶ BeforeRemoveParticipantEvent
- ▶ BeforeUpdateParticipantEvent
- ▶ AddParticipantEvent
- ▶ RemoveParticipantEvent
- ▶ UpdateParticipantEvent

Session

REST API

- ▶ **POST** /collaboration/sessions
- ▶ **GET** /collaboration/sessions/{sessionId}
- ▶ **PATCH** /collaboration/sessions/{sessionId}
- ▶ **DELETE** /collaboration/sessions/{sessionId}
- ▶ **GET** /collaboration/sessions/{sessionId}/participants
- ▶ **POST** /collaboration/sessions/{sessionId}/participants
- ▶ **PATCH** /collaboration/sessions/{sessionId}/participants/{participantId}
- ▶ **DELETE** /collaboration/sessions/{sessionId}/participants/{participantId}

Invitation

Managing invitations

- ▶ The `\Ibexa\Contracts\Collaboration\InvitationServiceInterface` interface
- ▶ `InvitationServiceInterface::createInvitation(InvitationCreateStruct $createStruct): InvitationInterface;`
- ▶ `InvitationServiceInterface::updateInvitation(InvitationInterface $invitation, InvitationUpdateStruct $updateStruct): InvitationInterface;`
- ▶ `InvitationServiceInterface::deleteInvitation(InvitationInterface $invitation): void;`

Session

Extensibility

Participant events

- ▶ BeforeAddParticipantEvent
- ▶ BeforeRemoveParticipantEvent
- ▶ BeforeUpdateParticipantEvent
- ▶ **AddParticipantEvent – Invitation is sent**
- ▶ RemoveParticipantEvent
- ▶ UpdateParticipantEvent

Invitation

Finding invitations

- ▶ InvitationServiceInterface::getInvitation(int \$id): InvitationInterface;
- ▶ InvitationServiceInterface::getInvitationByParticipant(ParticipantInterface \$participant): InvitationInterface;
- ▶ InvitationServiceInterface::findInvitations(?InvitationQuery \$query = null): InvitationListInterface;

Invitation

Invitation status

- ▶ Pending
- ▶ Accepted
- ▶ Rejected

Invitation

Extensibility

Events

- ▶ BeforeCreateInvitationEvent
- ▶ BeforeDeleteInvitationEvent
- ▶ BeforeUpdateInvitationEvent
- ▶ CreateInvitationEvent
- ▶ DeleteInvitationEvent
- ▶ UpdateInvitationEvent

Invitation

REST API

▶ **POST** /collaboration/sessions/{sessionId}/invitations



It's not limited to Content!

Content collaboration

- ▶ `\lbexa\Contracts\Share\Collaboration\ContentSession`

 - VersionInfo

 - Language

- ▶ `ContentSessionScope`

 - View

 - Edit

- ▶ `Query`

 - ContentId

 - Content (Content ID, Version Number, Language ID)





Creating a shared Cart

<https://github.com/ibexa/summit-2025-collaboration>



Creating a shared Cart

1

Database

Create tables to hold
Cart session data

2

Cart Session

Create the Cart
session objects

Integrate the
persistence layer

3

Permissions

Allow Participant to
access the Cart

4

Controllers

Build dedicated
controllers to manage
the Cart sharing flow

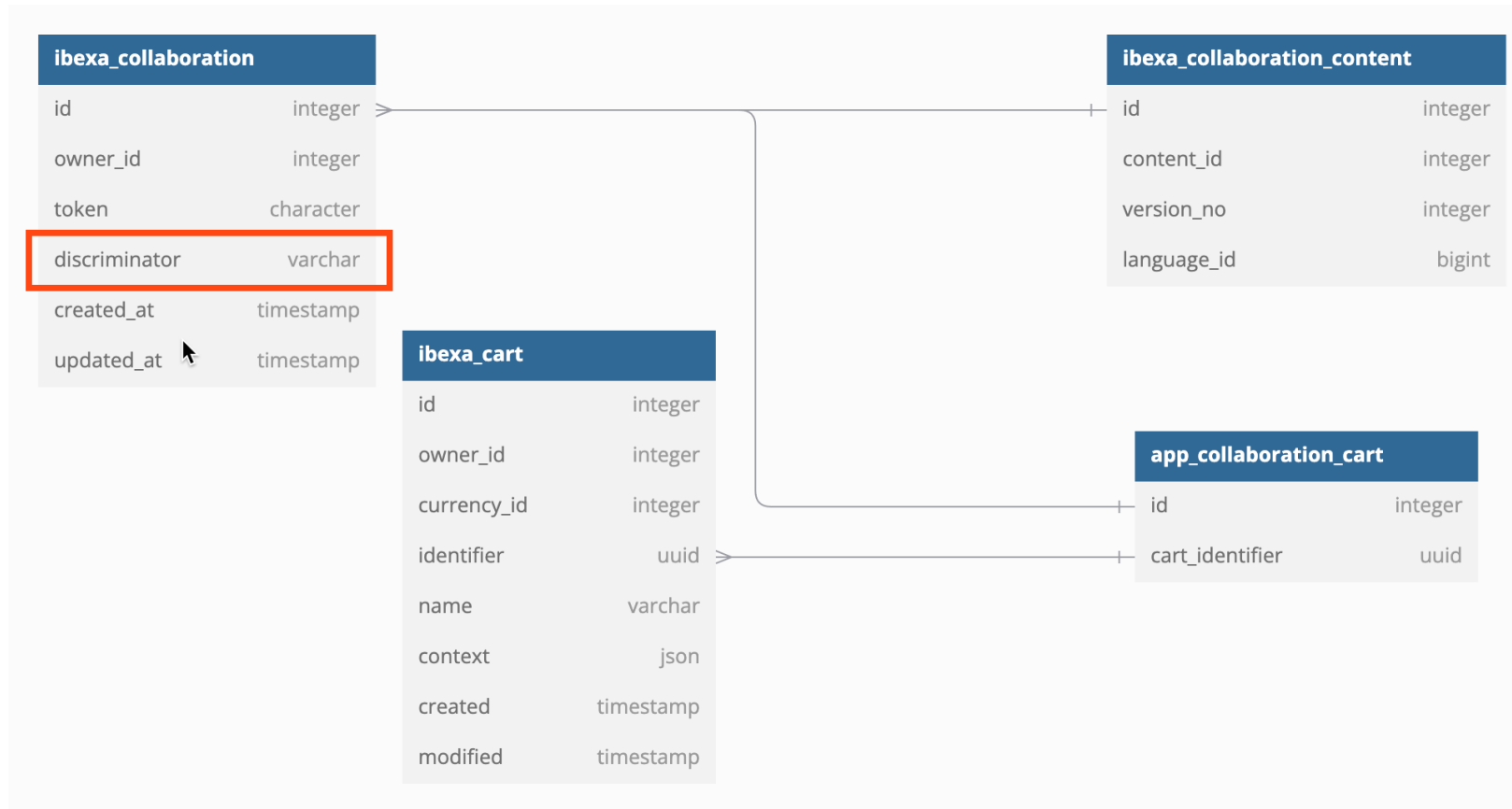
5

Templates & Forms

Integrate with
Symfony Forms

Make it beautiful

Step 1 - Database



Step 2 – Cart session

- ▶ Structs and Value Objects:

- ▶ CartSessionCreateStruct
- ▶ CartSessionUpdateStruct
- ▶ CartSession
- ▶ CartSessionType
- ▶ ...

Step 2 – Cart session

```
final class CartSessionType implements SessionScopeInterface
{
    public const SCOPE_VIEW = 'view';
    public const SCOPE_EDIT = 'edit';

    public const IDENTIFIER = 'cart';

    /* ... */
}
```

Step 2 – Cart session

App\Collaboration\Cart\Persistence\Gateway\DatabaseGateway:

arguments:

\$connection: '@ibexa.persistence.connection'

tags:

- name: ibexa.collaboration.persistence.session.gateway
discriminator: !php/const \App\Collaboration\Cart\CartSessionType::IDENTIFIER

App\Collaboration\Cart\Persistence\Mapper:

tags:

- name: ibexa.collaboration.persistence.session.mapper
discriminator: !php/const \App\Collaboration\Cart\CartSessionType::IDENTIFIER

Step 3 – Permissions

- Decorate the PermissionResolver and CartResolver

```
public function canUser(PolicyInterface $policy): bool
{
    if ($this->isCartPolicy($policy) && $this->isSharedCart($policy->getObject())) {
        return true;
    }

    return $this->innerPermissionResolver->canUser($policy);
}
```

Step 3 – Permissions

```
private function isSharedCart(?CartInterface $cart): bool
{
    if ($cart === null) {
        return false;
    }

    /* ... */
    $session = $this->getCurrentCartCollaborationSession();
    if ($session !== null) {
        try {
            return $cart->getId() === $session->getCart()->getId();
        } catch (NotFoundException $e) {
        }
    }
    /* ... */

    return false;
}
```

Step 3 – Permissions

```
private function getCurrentCartCollaborationSession(): ?CartSession
{
    $token = $this->requestStack->getSession()->get(self::COLLABORATION_SESSION_ID);
    if ($token === null) {
        return null;
    }

    try {
        $session = $this->sessionService->getSessionByToken($token);
        if ($session instanceof CartSession) {
            return $session;
        }
    } catch (NotFoundException|UnauthorizedException) {
    }

    return null;
}
```


Step 4 – Controllers

```
#[AsController]
#[Route('/shared-cart/create', name: 'app.shared_cart.create')]
final class ShareCartCreateController extends AbstractController
{
    /* ... */
    $session = $this->sessionService->createSession(
        new CartSessionCreateStruct($cart)
    );

    $this->sessionService->addParticipant(
        $session,
        new ExternalParticipantCreateStruct(
            $data->getEmail(),
            CartSessionType::SCOPE_EDIT
        )
    );
    /* ... */
}
```

Step 4 – Controllers

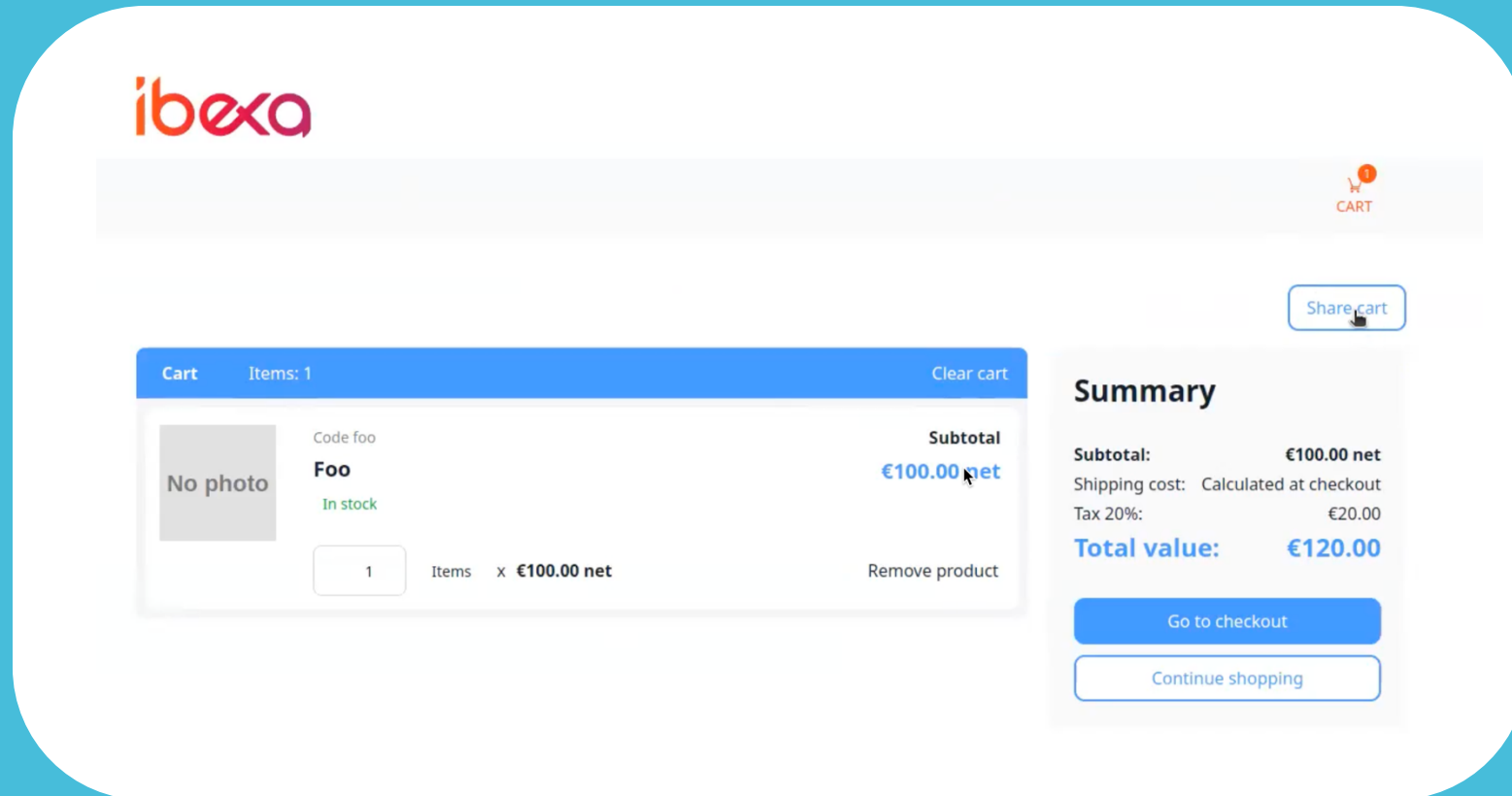
```
#[AsController]
#[Route('/shared-cart/join/{token}', name: 'app.shared_cart.join')]
final class ShareCartJoinController extends AbstractController
{
    /* ... */
    $session = $this->sessionService->getSessionByToken($token);
    if ($session instanceof CartSession) {
        $request->getSession()->set(self::CURRENT_COLLABORATION_SESSION, $session->getToken());

        return $this->redirectToRoute('ibexa.cart.view', [
            'identifier' => $session->getCart()->getIdentifier(),
        ]);
    }

    throw $this->createAccessDeniedException();
}
```

Step 5 – Templates and Forms

Integrate the new Session type into your application





Shared cart demo



The Collaboration LTS update

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- ▶ **Future plans:**
 - ▶ **Page Builder collaboration**
 - ▶ **Shopping list sharing**



Questions?



Thank you!