

# Element X Web



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## Speaker

- David Langley, Engineering Manager
- Gaelle Hunt, Product designer
- Danielle Kirkwood, Product Manager

## Element Mission: Connect People

- We build & sell a sovereign and secure open collaboration platform

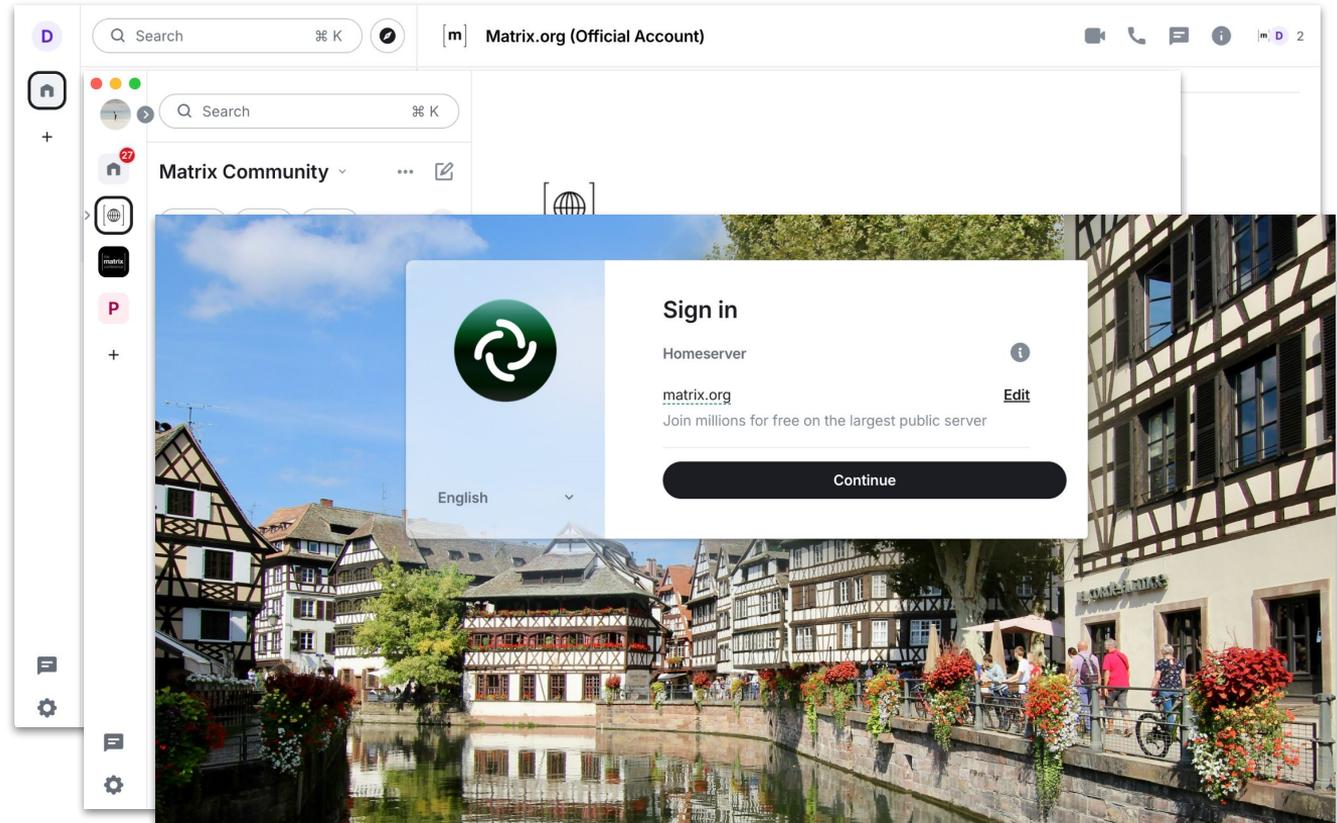
## Agenda

- What is Element Web & What is Element X Web?
- How will we get there?
- What will it look like?

# What is Element Web?

Element's Web based client for Matrix, providing secure communications for people, groups, communities, and workplaces.

- We also have a desktop version
- We also have a Pro version



# Element X Web

- **First, what is Element X?**
  - Our next gen apps
- **What is the success of Element X Mobile?**
  - Focus on 4 main qualities

## Objectives

- Focus on high quality and delightful user experience
- Inspire confidence and trust
- Be familiar, comfortable, easy to navigate
- Prioritise stability, resilience & performance



# The roadmap

In order to reach our objectives, we approach our roadmap in 'phases'

- Each phase includes
  - Advancements to the **user experience** 🥰
  - Features that drive more **productivity** for customers 💰
  - Improvements that make the app more **reliable** and maintainable 🧱
- Inside each phase we
  - Focus 1st on the **highest impact** customer changes
  - Build for the **future**
  - Include improvements to **accessibility**

# Element Web & Desktop - Delivery Phases



## A fresh start

Lightning fast performance & intuitive interfaces.

Refresh the experience of Web and start the EX journey.

- Updated right panel
- New room list
- Improved Accessibility
- Compound integration

## Conversations that flow

Enhanced timeline performance and features

Improve individual interactions in the main chat timeline (including performance)

- Timeline 2.0
- Improve Module API
- Content Scanner
- Move to MVVM + JS-SDK

## Get your updates

Updated notifications and simplified workflows

Users should know why and where they are receiving notifications and how to manage/triage them

- User status'
- Improved Spaces
- Activity centre
- Rust-SDK under WASM

## Search & Beyond

Global search for rooms and messages

- Move to native Rust-SDK

Tools for effective collaboration

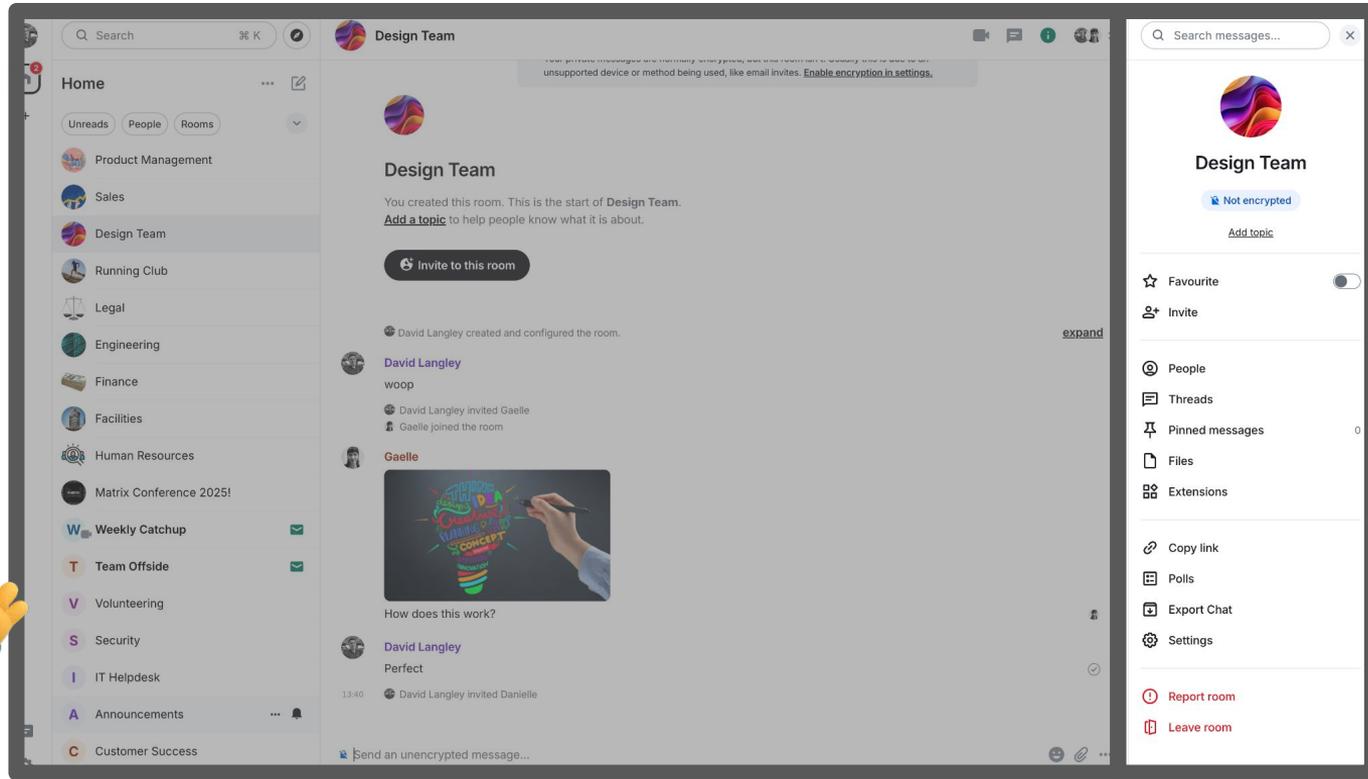
- Widgets and integrations

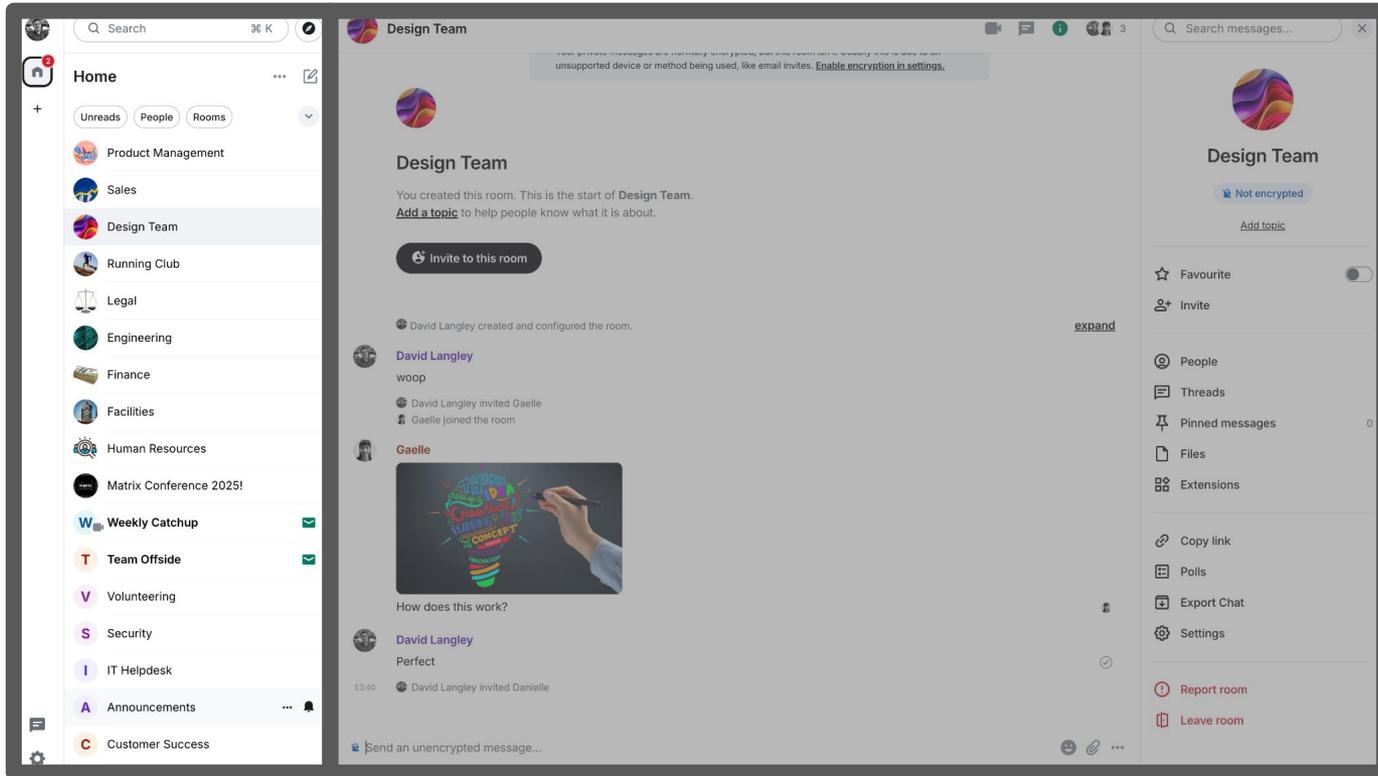
Create & Share

- Creating rooms, user onboarding, and more...

# The Journey



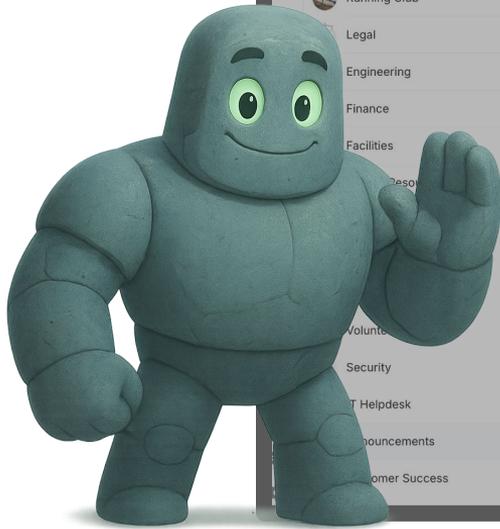
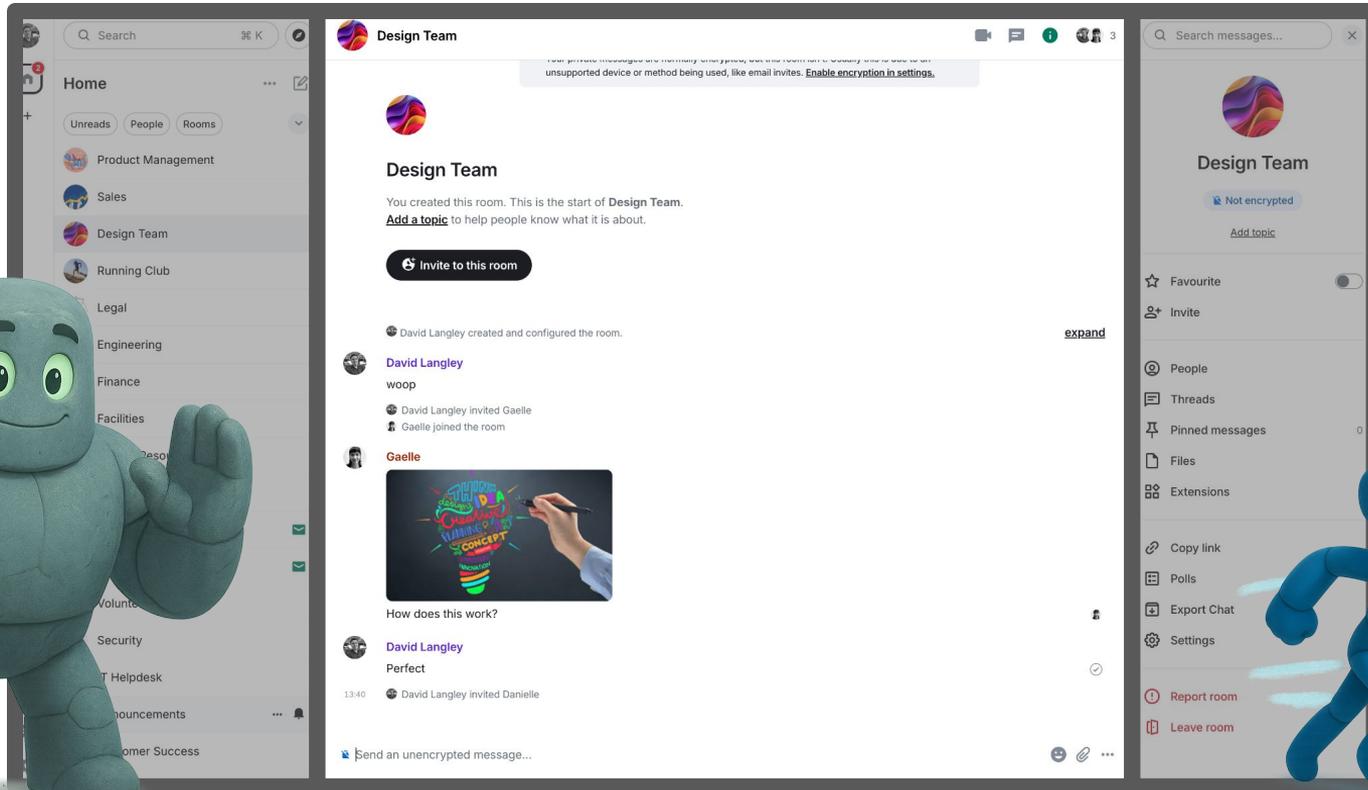




The screenshot displays the Element messaging application interface. On the left is a sidebar titled "Home" with a search bar and a list of rooms: Product Management, Sales, Design Team (selected), Running Club, Legal, Engineering, Finance, Facilities, Human Resources, Matrix Conference 2025!, Weekly Catchup, Team Offside, Volunteering, Security, IT Helpdesk, Announcements, and Customer Success. The main area shows the "Design Team" chat room. At the top, it says "Design Team" and "You created this room. This is the start of Design Team. Add a topic to help people know what it is about." Below this is an "invite to this room" button. The chat history includes a message from David Langley: "David Langley created and configured the room." followed by "woop". Another message from David Langley says "David Langley invited Gaelle" and "Gaelle joined the room". A message from Gaelle shows a hand-drawn diagram of a lightbulb with the words "CONCEPT", "CHANGE", "IMPROVE", "GROW", and "WIN" around it, with the question "How does this work?". David Langley replies "Perfect". At the bottom, a message from David Langley says "David Langley invited Danielle". The right sidebar contains room settings: "Design Team", "Not encrypted", "Add topic", "Favourite" (toggle), "Invite", "People", "Threads", "Pinned messages", "Files", "Extensions", "Copy link", "Polls", "Export Chat", "Settings", "Report room", and "Leave room".



SIMPLE

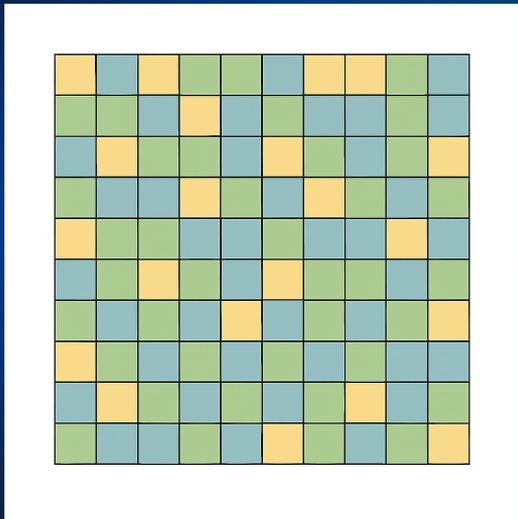


**RELIABLE**

**FAST**

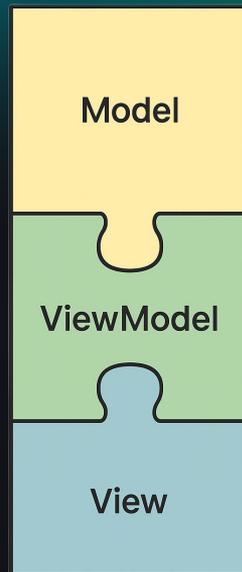
# MVVM

Old code



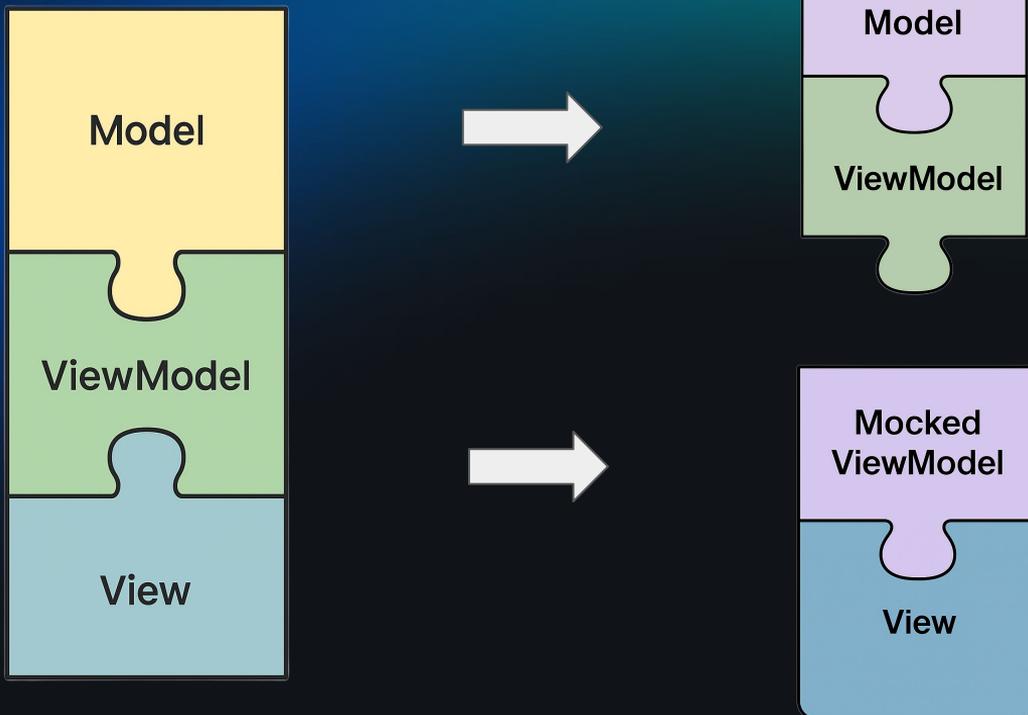
See our docs [here](#).

New code

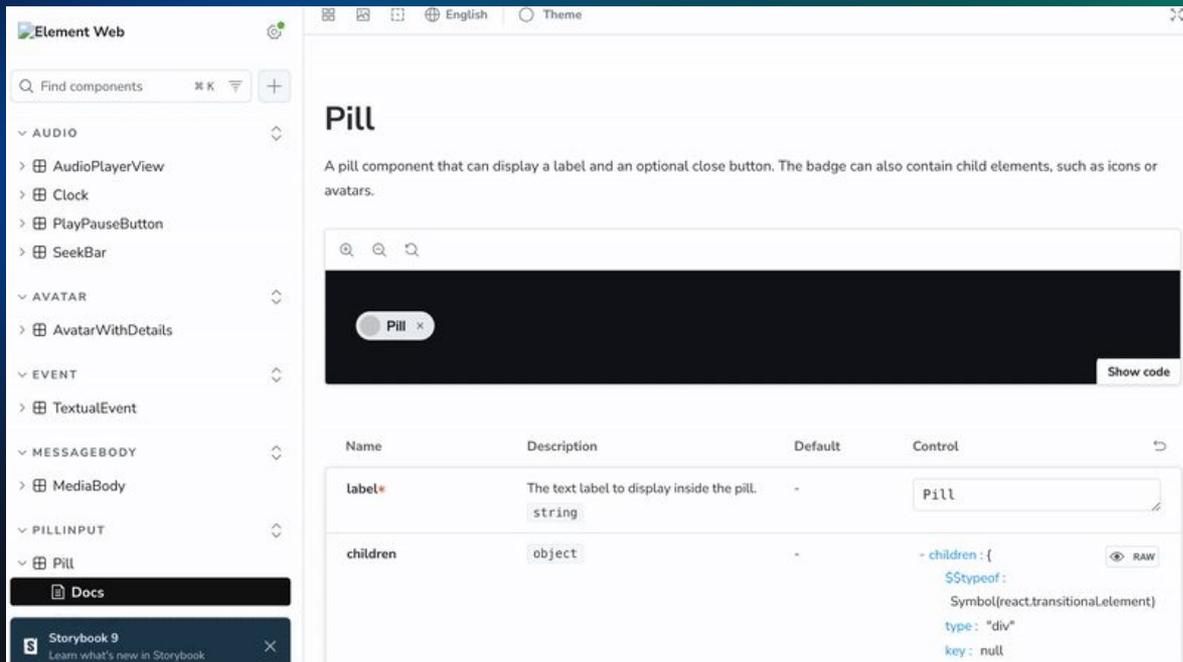


-  = Business Logic
-  = Presentation Logic
-  = View Logic

# Reliable: Unit tests



# Reliable: Storybook and Screenshot tests



The screenshot shows the 'Element Web' interface. On the left is a sidebar with a search bar and a list of component categories: AUDIO, AVATAR, EVENT, MESSAGEBODY, and PILLINPUT. The 'Pill' component is selected. The main content area displays the 'Pill' component name, a description, a visual preview of the component, and a table of its props.

**Pill**

A pill component that can display a label and an optional close button. The badge can also contain child elements, such as icons or avatars.

`Search` `Search` `Search`

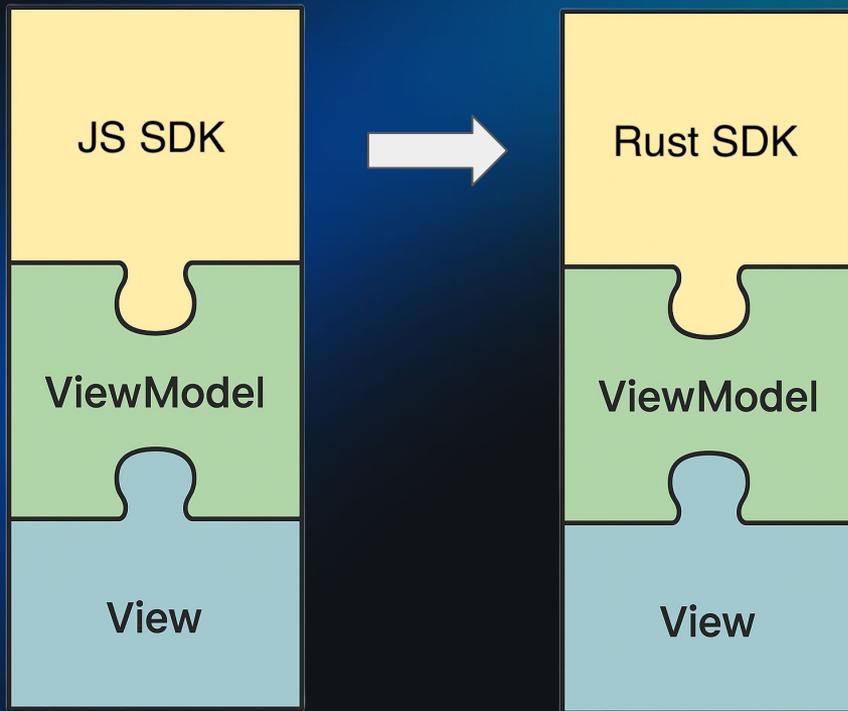
`Pill` `×` `Show code`

Name	Description	Default	Control
<code>label*</code>	The text label to display inside the pill. <code>string</code>	-	<code>Pill</code>
<code>children</code>	<code>object</code>	-	<pre> - children : {   \$typeof:     Symbol(react.transitionalLelement)   type: "div"   key: null </pre>

`Docs`

`Storybook 9`  
Learn what's new in Storybook

# Fast: A new SDK

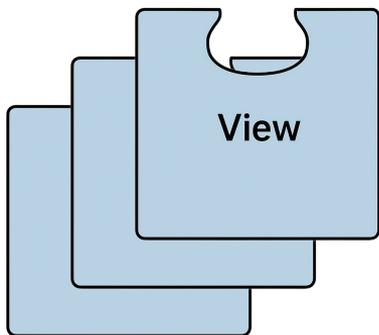


## Rust SDK

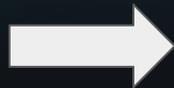
- Used in EX mobile apps
- Instant login, launch sync
- 15x memory improvement (1.4GB → 90MB of heap)
- An improved and secure storage layer

# Familiar: Shared components

Shared Components NPM Package



Element Web



Admin Console

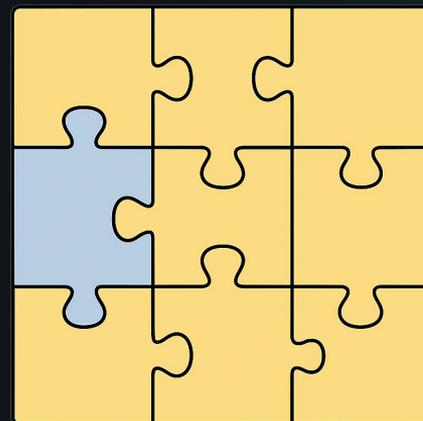
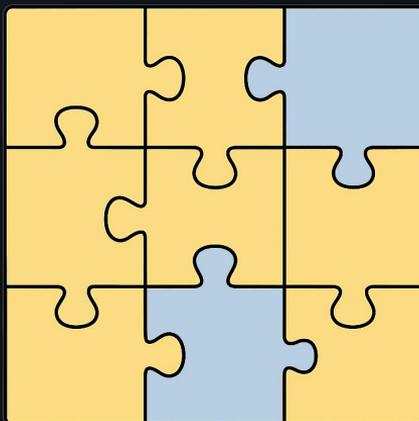
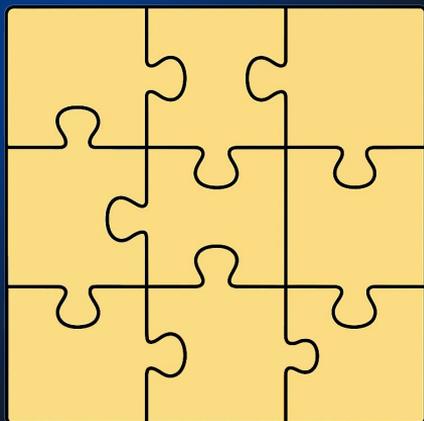


Element X Web(Aurora)

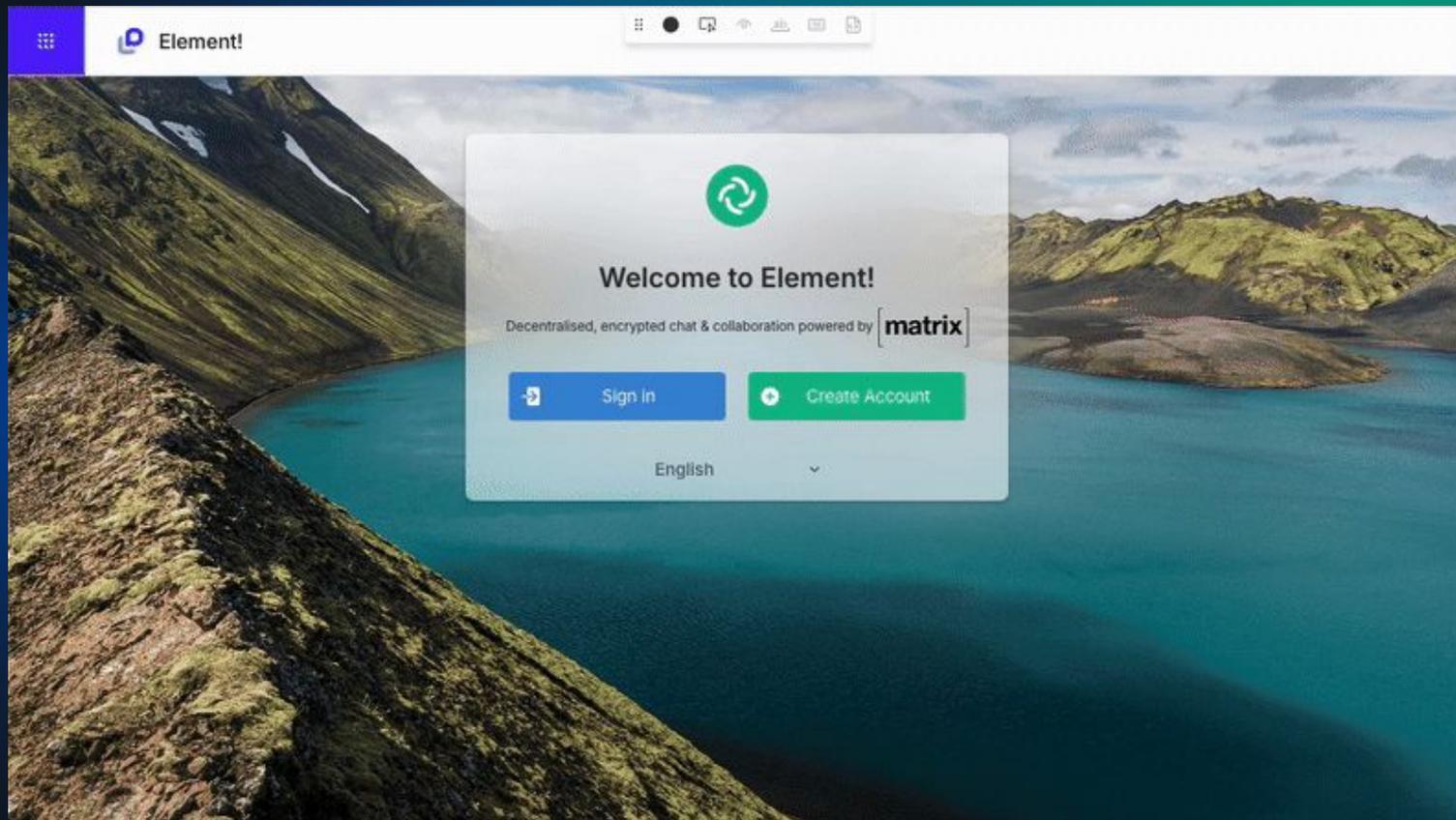


Element Web Modules

# Familiar: Element Web Modules



# Banner module in openDesk



# Multiroom Module



Grid view Manage Rooms

### Facilities

You created this room. This is the start of Facilities. [Add a topic](#) to help people know what it is about.

[Invite to this room](#)

David Langley created and configured the room. [expand](#)

David Langley  
13:32 Help I'm locked out again!

### Sales

David Langley created and configured the room. [expand](#)

David Langley  
  
13:35 Looking  
gooooooooo  
d!

### Human Resources

[Invite to this room](#)

David Langley created and configured the room. [expand](#)

David Langley  
  
13:36 It's us!

### Design Team

  
How does this work?

David Langley  
13:46 Perfect

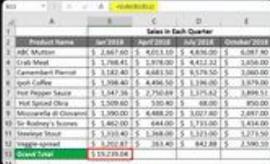
David Langley invited Danielle

Send an unencrypted message...

### Legal

[Invite to this room](#)

David Langley created and configured the room. [expand](#)

David Langley  
13:55 

	A	B	C	D	E
1	Product Name	2018-12-31	2019-03-31	2019-06-30	2019-09-30
2	ABC Mutton	\$ 2,667,603	\$ 4,053,105	\$ 4,636,000	\$ 6,087,400
3	Crab Meat	\$ 3,768,482	\$ 3,279,000	\$ 4,432,000	\$ 3,058,000
4	Camembert Cheese	\$ 3,145,400	\$ 4,883,500	\$ 5,976,500	\$ 3,060,000
5	Spout Coffee	\$ 3,768,400	\$ 4,496,500	\$ 3,196,000	\$ 3,879,000
6	Hot Pepper Sauce	\$ 1,347,300	\$ 2,750,000	\$ 2,175,000	\$ 3,899,500
7	Hot Natural Oils	\$ 5,309,000	\$ 3,109,000	\$ 188,000	\$ 800,000
8	Miso Paste & Soybean	\$ 1,900,000	\$ 4,689,000	\$ 3,607,000	\$ 2,897,000
9	Sea Buckthorn & Sesame	\$ 846,100	\$ 444,000	\$ 3,723,000	\$ 4,434,000
10	Unseasoned Tofu	\$ 3,333,400	\$ 3,368,000	\$ 3,333,000	\$ 3,273,000
11	Unspiced Apples	\$ 3,202,800	\$ 353,400	\$ 842,880	\$ 2,900,000
12	<b>Total Sales</b>	<b>\$ 33,234,000</b>			

# Aurora Demo.



# Vision

# Designing our vision for Element X Web



Designing a vision is not about making pretty pictures, it's a process

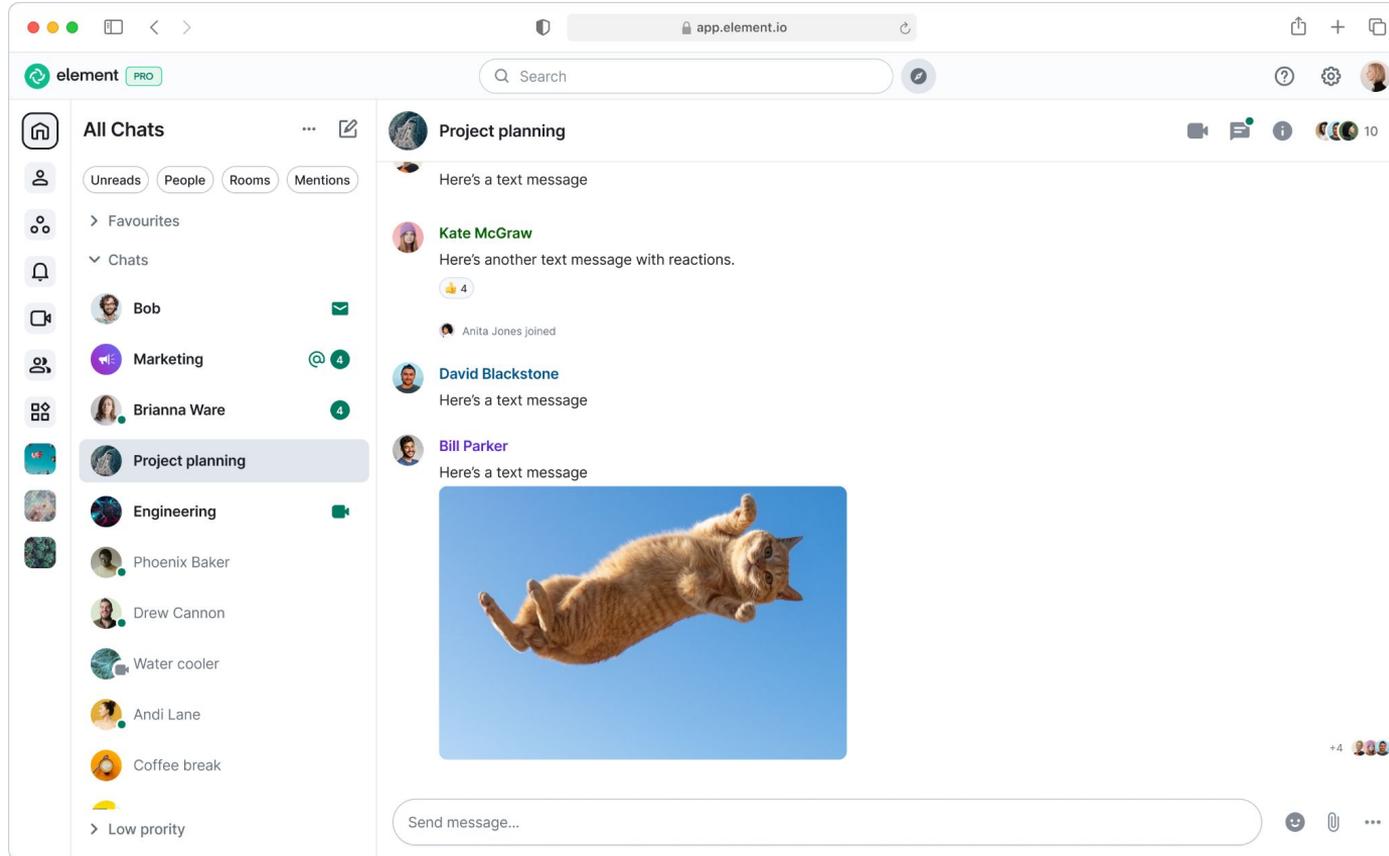
# Fast, simple, familiar, reliable

- Understanding today's state of the product and UX debt
- Avoid creating problems on top of problematic areas
- Identify key areas and prioritise problems to then maximise impact
- Identify and integrate user data: pain points and aspirations
- Understand competition whilst being unique
- Use Compound to modernise UI and ensure accessibility

# Aspirations, big picture and long term goals

- Element is familiar and easy to use
- Calendar and scheduled meetings
- Integration of a user directory
- File sharing capabilities - drive integration
- Ability to better identify and collaborate with external partners
- Search to be more efficient

# What does it mean?



The screenshot shows the Element chat application interface. At the top, there is a browser address bar with the URL `app.element.io`. Below the browser bar is the application header, which includes the Element logo, a search bar, and user profile icons. The main interface is divided into three sections: a left sidebar for chat management, a central chat area, and a bottom message input area.

**Left Sidebar (All Chats):**

- Home icon
- Unreads, People, Rooms, Mentions (filters)
- Favourites
- Chats (expanded)
- Bob (with envelope icon)
- Marketing (with 4 mentions icon)
- Brianna Ware (with 4 mentions icon)
- Project planning** (selected, with video icon)
- Engineering (with video icon)
- Phoenix Baker
- Drew Cannon
- Water cooler
- Andi Lane
- Coffee break
- Low priority

**Central Chat Area (Project planning):**

- Header: Project planning (with video, chat, info, and 10 users icons)
- Message 1: Here's a text message
- Message 2: **Kate McGraw** Here's another text message with reactions. (with 4 reactions icon)
- Message 3: Anita Jones joined
- Message 4: **David Blackstone** Here's a text message
- Message 5: **Bill Parker** Here's a text message
- Image: A ginger cat lying on its back against a blue sky.

**Bottom Message Input Area:**

- Send message... (input field)
- Reaction, Attach, and More options icons

# Spaces

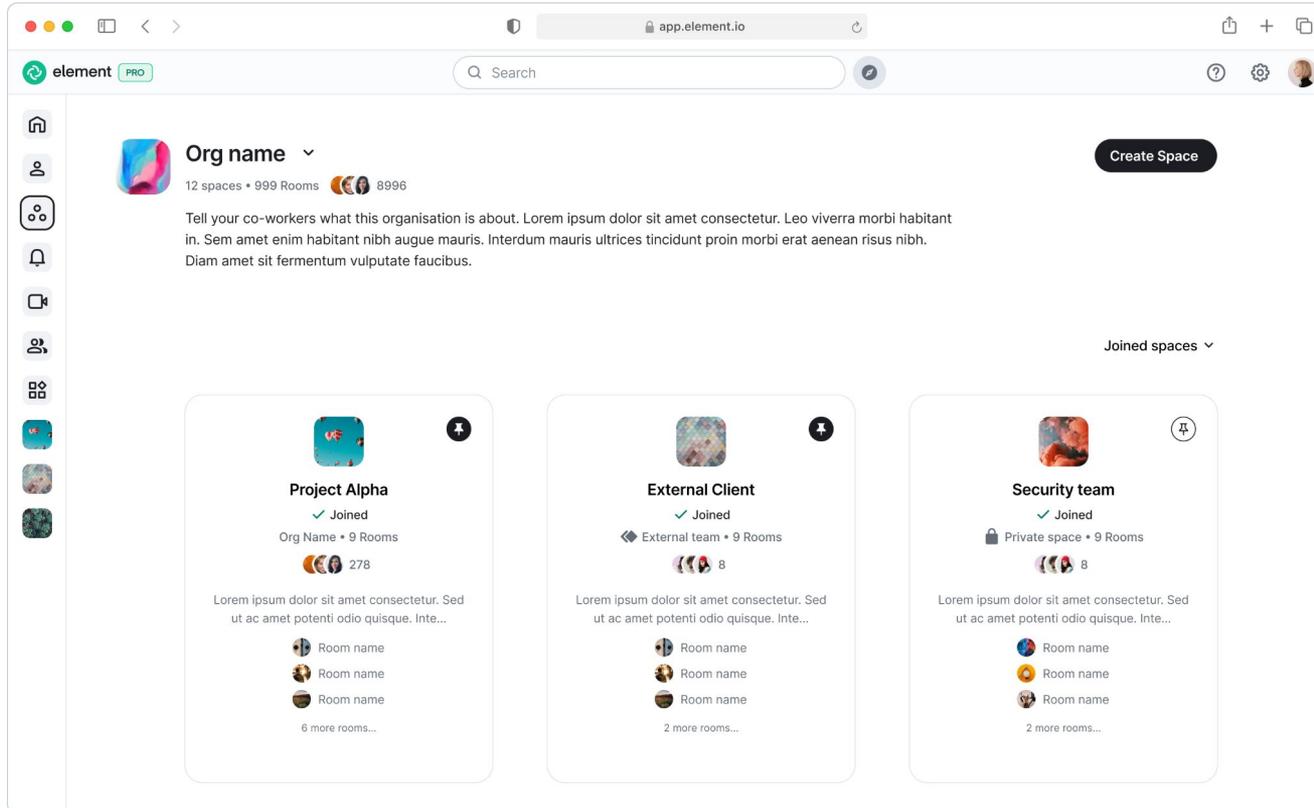
**People don't  
understand  
what a space  
is**

**People  
struggle to  
find spaces  
home**

**Opening and  
closing  
subspaces is  
tedious**

**Missed  
opportunity  
to collaborate  
with external  
partners**

# How it is developing



# Room list

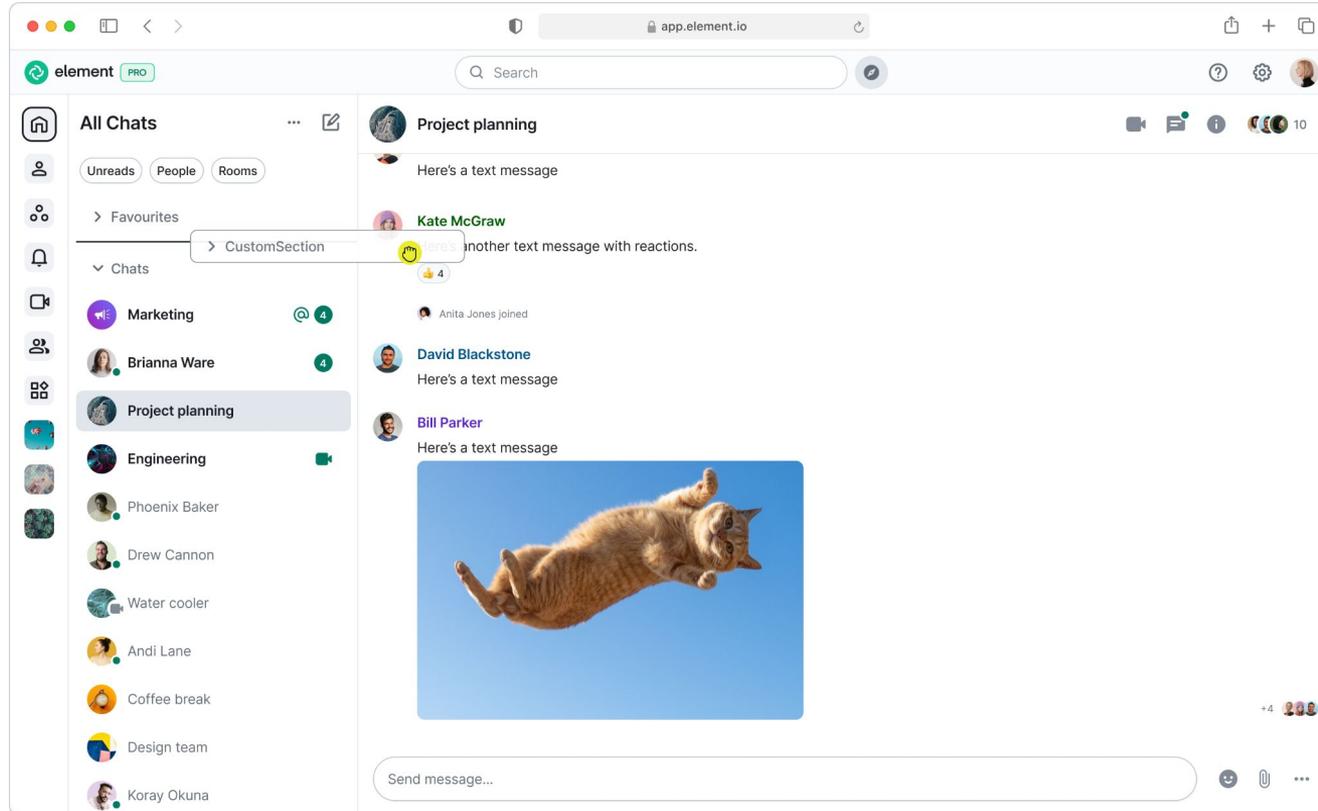
**Lack of filters  
for Rooms  
and DMs  
forces long  
scrolls**

**Notifications  
can get  
hidden**

**People  
struggle to  
see relevant  
content**

**People can't  
find how to  
create new  
chats**

# How it is developing



# Message & activity management

**People keep  
losing  
important  
messages**

**Keeping track  
of messages  
require  
mental and  
manual effort**

**Can't keep  
track of  
threads that  
matter to me**

**Notifications  
need to be  
clearer**

# How it is developing



The screenshot displays the Element Pro web interface. At the top, there's a browser window with the URL 'app.element.io'. The interface includes a search bar, a navigation sidebar on the left with icons for home, profile, groups, notifications, and a grid view, and a main content area. The 'Activity centre' is active, showing a list of notifications. One notification from 'Jessie' is highlighted with 'Decline' and 'Accept' buttons. Below it, a notification from the 'Design team' is visible. The main thread, titled 'Thread in Project Alpha', is shown with a 'Following' button. The thread contains several messages: Sally Sanderson asks about making initial behavior a default state; David Blackstone responds that he can reconsider specs but needs further investigation; Kate McGraw suggests that changes might impact the user journey and does not recommend them; Rosalee Blackwell agrees that further investigation with past usage data is needed; David Blackstone agrees and suggests a call; Sally Sanderson agrees and suggests organizing a call. A 'Reply to thread' input field is at the bottom.

element PRO

Search

Activity centre

All @Mentions Threads Invites

Jessie Invite 21 November 2023

@jessie:server.xyz

Decline Accept

Design team @Mention 10:30

Olivia Rhye

An @Name message goes in this space here. Up to two lines...

Sally Sanderson Thread 10:30

In Project Alpha

Should we consider making the initial behaviour a default state?

4 Unread

Design team @Mention 10:30

Olivia Rhye

An @Name message goes in this space here. Up to two lines...

Write Club Thread 10:30

Phoenix baker

Thread in Project Alpha

Following

Sally Sanderson

Should we consider making the initial behaviour a default state?

David Blackstone

I can definitely reconsider the original specs but this would require further investigation.

Unread

Kate McGraw

Changing this now may have an impact on the log in user journey. I would not recommend at this stage

4

Rosalee Blackwell

From my point of view, this is something that could be further investigated with data from past usage

David Blackstone

Yep, kind of agree with both. Perhaps we should have a call to align?

Sally Sanderson

Yes, let's organise a call

Reply to thread

**Your input = better UX for everyone.**

**Share your thoughts, pain points, or ideas via the QR code**



**Or drop by at the  
Element booth**

# Questions

# Element X Web & Desktop - Delivery Phases



Updated: October 2025

## Phase 1 A fresh start

### Lightning fast performance & intuitive interfaces

Completely refresh the experience of Element Web so that we hit an "EX" stride.

#### Example Product Epics

- New room list with sliding sync technology
- Accessibility

#### Tech Strategy

- Element Compound integration

## Phase 2 Conversations that flow

### Enhanced timeline performance and features

Improve interactions in the main chat timeline & threads, including a performant timeline.

#### Example Product Epics

- Timeline 2.0
- Improved Module API
- Content Scanner
- Element Pro

#### Tech Strategy

- Move to MVVM + JS-SDK

## Phase 3 Get your updates

### Updated settings and notifications for simplified workflows

Users should be able to understand why and where they are receiving notifications and how to manage them.

#### Example Product Epics

- User status (simplified)
- Improved Spaces
- Notification settings
- Activity Centre

#### Tech Strategy

- Rust-SDK under WASM

## Phase 4+ Search & Beyond

### Global search for rooms & messages

#### Tech Strategy

- Move to native Rust-SDK

### Phase 5 : Tools for effective collaboration

Widgets & integrations get an overhaul.

### Phase 6 : Create & Share

Creating rooms, user onboarding, and more.