

Secure collaboration and messaging for education

Element is a combined collaboration and messaging app. It's designed for easy collaboration and interoperability between research bodies, universities and external partners - thanks to an open network, end-to-end encryption and data sovereignty.

Element gives universities a secure, flexible way to introduce real time communications. As universities recover from the pandemic, it helps introduce new ways of working, support for remote learning and multi-campus communication.

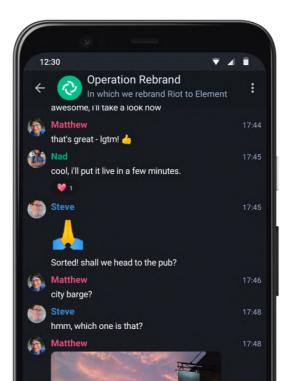
- Open network for easy collaboration between people and organisations
- Unlimited chat, voice and video connections
- Digital sovereignty to protect data and intellectual property, with end-to-end encryption, cross-signing and audit bots

Put staff and students in their Element

Element provides real time communication for staff and students. It offers instant messaging, voice, video, screen-sharing and file sharing; for everything from 1:1s to huge chat rooms. Widgets enable chat rooms to incorporate a wide range of other apps as well as data and video streaming.

Element was built to put its users in control, rather than having to rely on an IT department or team admin. Based on the open Matrix network, staff and students are able to find and connect with each other easily. Creating a chat room and inviting people is simple, helping students and staff discuss topics and share ideas with peers around the globe. There are no limits on the number of internal or external contacts people can make, and by using a public server or self-hosting, Element offers a cost-free way for students to connect.

Digital sovereignty and end-to-end encryption protects individuals, their data, and institutions' intellectual property. Formal networks - such as those run by a university or community - can include audit bots and proactive moderation to ensure a safe and supportive environment.



Welcome every Element

Perhaps the key benefit of Element for use in academia and research is that it's based on Matrix, an open network which makes it easy for people to find and connect with each other. Element is instantly interoperable with any other Matrix-based messenger, and can bridge into proprietary 'walled garden' systems such as such as Slack, Microsoft Teams and Telegram. A university can run a fully managed deployment for staff and students, who can enjoy unlimited connections with external contacts at no additional cost to the university.

Element gives academic staff and students the security and flexibility to communicate on their own terms. It is available for use on devices on iOS, Android, Web and Desktop which support most users. Alternative Matrix-based clients are available for those using low-end or legacy devices, making Matrix an inclusive messaging option. Element has been developed based on web accessibility standards and supports 60 languages.

Element gives you control and security

A range of deployment options gives institutions, staff and students the freedom to select where their user data and messages are stored. This ensures digital sovereignty which protects privacy and stops data mining and routine third party access. End-to-end encryption ensures messages can only be decrypted by those in the conversation. Cross-signed device verification - a simple process whereby end-users can authenticate each others' devices by comparing on-screen emojis or a QR code - guards against imposters and eavesdroppers. A range of community management tools are available to maintain a healthy and productive collaborative environment.

Data ownership and control	Element	Slack	Microsoft Teams
An open network (no walled garden, no vendor lock-in) Use your own domain for hosting independence and branding	•	8	8
Data sovereignty assured	•	8	8
On-premise and hosted deployments available		8	×
Decentralised architecture for better resilience		×	×
Open source	•	8	×
Open standard based	•	8	×
Single sign-on	•		
Open API	•		
Org-wide app deployment		Ø	

Use Element to get a reaction

As simple to use as consumer-grade messaging apps, Element's endless flexibility brings discussion to life. Individuals are free to create their own rooms and communities, complete with shared files, embedded widgets and data feeds. Real time discussion rooms enable interaction during lectures and co-working, along with voting, breakout discussions and screen-sharing.

By empowering end-users, and enabling unlimited usage, staff and students are free to take discussions around the globe bringing new perspectives, ideas and expertise.

Use Matrix to collaborate with your extended ecosystem

The open standard Matrix protocol enables universities to work collaboratively across their entire ecosystem.

Free, no-hassle individual usage

Individuals researchers, academics and students are able to use the free Element app and a free public Matrix server, such as matrix.org. It provides similar functionality, and enables a cost-free way for individuals to link into a university's system.

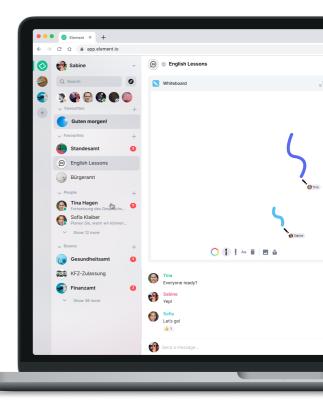
Jser empowerment	Element	Slack	Microsoft Teams
External contacts can use a different app	•	8	8
Users can connect with external people, without admin support	②	×	×
Unlimited rooms/channels	②	8	×
Peer-to-peer connectivity for extreme environments	⊘	×	×
Bridges to popular IRC networks like Freenode & OFTC	Ø	8	8
Native feel connections to other networks (e.g. Discord & Telegram).	•	8	8
Unlimited external connections at no extra cost	•	8	Ø
Number of languages available	60	7	35
Series of plug-ins/widgets for other apps	⊘		•
Accessibility friendly (screen reader support)	⊘	×	•
Supported languages for development	13	5	3
Web, Android, iOS, Windows, macOS, Linux	Ø		
Supports other platforms and devices; IOT and Terminal	②	8	8

Communities, institutions and universities who don't want to manage an on-premise solution

A fully managed hosted solution is available from Element Matrix Services supporting small research groups, through to the largest of university deployments. Institutions still retain ownership of their data, and have full data portability to migrate their system elsewhere. All data remains end-to-end encrypted. Element Matrix Services delivers all the benefits and flexibility of self-hosting, but without the overhead of managing the system internally.

Universities that want an on-premise system

An institution-wide, or even nationwide, implementation can be created and managed as an on-premise system. An on-premise deployment gives complete ownership and control of data, and can integrate with existing corporate IT systems such as single sign-on, anti-virus, auditing and compliance. On-premise solutions are supported on an on-going basis by Element, for the likes of University of Innsbruck and Humboldt University.



Functionalities	Element	Slack	Microsoft Teams
Support for legacy devices (e.g. older smartphones or chromebooks)	•	Ø	8
Read receipts	•	8	8
Multi-device	•	•	•
File sharing	•	•	
Audio conferencing	•	⊘	Ø
Video conferencing	•	•	Ø
Typing notifications	•	•	Ø
Presence			

Security and safety	Element	Slack	Microsoft Teams
End-to-end encrypted video	Ø	8	8
End-to-end encrypted voice		8	8
End-to-end encrypted messaging	⊘	8	8
End-to-end encrypted rooms		8	8
Ability to search own encrypted messages		8	8
Audited end-to-end encrypted rooms	Ø	8	8
End-to-end encryption by default		8	8
Cross-signed device verification	⊘	8	8
Proactive moderation in end-to-end encrypted rooms	Ø	8	8

Further reading

Element for education

Element plans and pricing

Contact Sales