



What is RSpace?

Rspace is an updated, improved, and much more scaleable version of our previous, highly successful ELN and sample tracking product called eCAT. RSpace was developed by an elite academic engineering team in Edinburgh, UK with design assistance from our partners Lab-Ally in Columbus, OH, USA. RSpace is an affordable and secure enterprise grade Electronic Lab Notebook (ELN) that catalyzes research and allows organizations to enjoy the benefits, efficiencies and long-term cost savings of centralized, paperless data storage, as well as lab management, IP protection, and seamless, secure collaboration. RSpace acts like a digital hub that facilitates your Data Management Plan (DMP) or Research Data Management (RDM) workflows through integration with commercial systems like Box, Dropbox, Google Drive, Mendeley and your existing shared file stores and archiving systems. RSpace also integrates with the eCAT inventory / sample tracking system and the popular chat and notification system, Slack, to provide a complete lab management solution. RSpace is extremely flexible and can be used in any research sector, or anywhere that secure and compliant document management or knowledge asset consolidation is important.

The key to the system's security and collaborative features is the fact that research data is not stored on the user's local device (where it is vulnerable and insecure), but on the secure RSpace server that is optimized for efficient oversight by your IT and data management teams. The server can be installed at your site, or on a cloud host of your choice, or you can opt to use our free public cloud server at cloud.researchspace.com. The server includes a secure, expandable file store (where raw data files are kept in their native format) and a MySQL database that records all data transactions and ties the system seamlessly together. Any HTML5 browser-equipped device can be used to create, read and edit content, including Mac and PC workstations, as well as most browser equipped smartphones and tablets. There is nothing to install for the users, they simply open a browser, log in to your institution's specific server and get to work. Licensing is based on "seats". You pay for access by specific named users. If a user leaves your organization, the vacated seat becomes available to a new user.

Some of the many features and benefits of RSpace include:

- Streamline record-keeping by replacing paper lab notebooks with a flexible, searchable, secure and easy to use electronic lab notebook.
- Organize, manage, version, and share documents. Old versions of documents are never deleted or overwritten and the full history of the document is easy to access.
- Batch import of MS word files that can then be edited inside the system makes initial setup fast and efficient.

- High speed rendering and in line viewing of most common document types and in-line viewing and annotating of image files, including zoomable viewing of even your largest high resolution images.
- Ensure proper role-based access to data that balances the needs of privacy and security with the benefits of collaboration and oversight.
- Establish dynamic, easy to manage, hierarchic sub-populations of scientists with role-based access to specific features and subsets of data.
- Use a simple directory to locate colleagues and understand who they work with, and what they are working on.
- Protect your IP, but simultaneously promote useful collaborations with scientists inside or outside your organization.
- Create, manage, and access data and lab records across any platform (PC's, Macs, tablets and smartphones). Collaborate with anyone, and send data to RSpace from any location with network access.
- Obviate the inefficient, unregulated and potentially insecure use of external thumb-drives, email, or outdated methods of sharing files between and communicating among colleagues or collaborators.
- Connect to popular commercial tools like Box, Dropbox, Google Drive MS OneDrive and others to unify diverse data sources you already work with and bring them together in a single system. On-site installations can even be configured to connect to your university's enterprise filestores or your lab's existing shared filestore if you use one.
- RSpace builds upon a well-known predecessor called eCAT, and can connect to the eCAT sample tracking system already used by your lab. The two products used together offer a total solution for laboratory data management. Future versions of eCAT will discontinue the notebook features but will add powerful new improvements to the proven sample tracking functionality.
- Find and monitor or reuse data, documents, or specific versions of documents 24/7 whether in the lab, office or field.
- Reduce search times by associating tags and captions with your files and resources. Use full text search, metadata search, Boolean logic and structured queries to easily locate a single document, experiment or piece of data from amongst years of diverse research assets.

- Give rich searchable meaning to data that is otherwise hard to search for. Add tags and captions to images and verbose data that can tend to lose their significance or overwhelm a downstream audience not present during the original research. Avoid duplication and reinvention by providing better location and comprehension of data today and far into the future.
- Link resources together in logical ways and allow them to be used in multiple contexts, See quickly how different experiments, literature and documents are related, and how your data has evolved or spawned new lines of research over time
- Enjoy piece of mind, knowing that all of your data is safe, secure and can be instantly exported in standard formats that will be supported for the indefinite future, regardless of trends in technology, or the RSpace product itself. None of your data will mysteriously vanish from your lab or organization ever again. Data stays safe and ownership is clear, despite staff turnover, computer replacements and institutional reorganizations.
- Export some or all of your RSpace data at any time, either as PDFs, industry standard XML .ZIP archives (ideal for moving resources between servers or archiving data to your existing archive system) or human readable native files and browser-viewable html. We can even help you with total or configurable archiving of lab data directly to your existing DSpace or other institutional repository. RSpace excels at data export where many other ELN solutions fail to deliver. This should be a key deciding factor for adoption by scientists and institutions who are concerned about getting locked into a particular system or who are worried that their data will be trapped in an ELN that they cannot easily export their data from in a structured and usable way. RSpace solves this problem completely.
- Use flexible real-time collaboration features to find information and expertise in your lab, department or entire organization. Know instantly who has worked on related subjects or with specific protocols in the past.
- Configure the system to match your needs by developing and sharing structured data forms that help maintain consistent workflow conventions and adherence to protocols.
- Convert your work into a template that can save everyone time. Templates can include workflows for experiments, supporting literature, protocols, forms, or indeed anything you do frequently, no matter how specialized. We can show you how to turn almost any workflow into a template or form that will make your lab more efficient.
- Recycle any content as quick and easy to use “snips”. Snips are combinations of images, text, tables or anything you can create in a notebook. Store and organize any number of snips to help you save time and be more efficient.

- Drag and drop simplicity. You can drag any file in any format from any source directly to RSpace.
- Access resources held in your existing file stores and link them to your RSpace Lab Notebook without duplicating disk usage. This is especially useful when working with very large data files that you do not want or need to physically move to RSpace, or when working with files that are already stored in [dropbox.com](https://www.dropbox.com) or [box.com](https://www.box.com).
- Administrators and PIs have instant, granular control of all RSpace server behaviors. View data and monitor server status, user logins, and access data from anywhere. PIs can even send feedback and requests to their researchers in real time and oversee every aspect of their lab personally or delegate tasks to trusted managers.
- RSpace features flexible implementation models and simple infrastructure needs. We will work with your IT staff to make sure that installation and deployment goes smoothly and makes your IT department and managers happy. LDAP and SAML2 single user sign on are supported, as well as efficient bulk provisioning options. RSpace requires almost no IT maintenance from the customer and Research Space provides all necessary help, documentation and support.
- Research Space was designed by researchers. Our professional support team can assist you with every stage of the deployment and the simple, fast GUI will assure rapid adoption. Responsive, ongoing, committed vendor support is a key element of any large-scale data management project and its importance should never be underestimated.
- Key architecture features include the fact that RSpace is a modular, extensible product based on open industry standards. Available APIs and code access make RSpace easy to connect to other systems and ensure that the product is highly sustainable. RSpace has a clear update path linked to industry trends. Modules and IT technologies that become outdated can be updated and modules incorporating new technologies can be easily added. Your RSpace support package includes all software updates (typically two a year) and the updates involve no significant interruption of service and no update of anything on the client machines.
- The use of a database and separate files store to hold your raw data means that RSpace does not slow down as data accumulates. The referential database contains text only and does not lock your files in a proprietary database from which you may not be able to extract them.
- Since all data in RSpace stays in its original, native file format in the secure file store, your data is not tied to this solution, or any particular database company or technology. Your valuable data can always be extracted in the future, regardless of your

organization's future data management strategy, database technologies or vendor decisions.

- Easy integration of third party plugins such as the chemaxon molecular drawing and chemical search tool.
- New features, modules and plug-ins are being added by our world-class engineers all the time. If you utilize a workflow, software product or data type that is not currently tightly integrated with RSpace, tell us about it. In many cases we can quickly extend our product to meet your specific needs.