

SigmaCERF Features & Benefits for the Scientist



1. Document all of your work easily and rapidly

Documenting your experiments was never this easy! Create a new experiment page from scratch, or reuse any of your existing pages as templates; drag and drop or copy and paste content - files, text, and images - from *anywhere*. SigmaCERF lets you work with any type of content, any type of file, using the authoring tools you already own and are proficient with - no large learning curve just to create experimental records! You can even copy and drag content from other applications!

And the SigmaCERF electronic lab notebook is not just an electronic lab notebook - it comes with a full-fledged Scientific Content & Document Management System, so that you can store all of the files, resources, and data your lab uses every day. Protocols, MSDS forms, literature - all at your fingertips, wherever you go.

2. Work with your data dynamically and in real time

Because the SigmaCERF electronic lab notebook is a true client-application system (unlike a web-browser based system); it can show your notebook pages and experiments in a visual and dynamic form. Many types of files and data are actually displayed inline - not just text, html, and Microsoft Office™ documents, not just GIF, JPG, and TIFF files - but actual scientific content, rendered dynamically so that you can interact with your data - sequence files and pherograms, alignments, molecular structures, and more! And using our SigmaCERF plugin system we can rapidly develop plugins for other data types as our users request them.

3. Find everything - fast

Everything that goes into the SigmaCERF notebook system (including files placed into the Scientific Content & Document Management System) is fully indexed for searching - keyword searches will return notebook entries created by not just yourself, but those created by your peers and colleagues - as well as documents, protocols, and literature - anything that has been placed into the system. SigmaCERF allows you to rapidly find *anything* that matches your keyword queries, while still adhering to strict 21CFR11 compliance requirements.

4. Collaborate instantly, easily, and securely

SigmaCERF allows you to easily share files and notebooks with anyone in your organization. Using role-based access (as required by 21CFR11), individuals can be given access to different resources with different permissions - an author in one project or notebook, a guest in others, an annotator in even others. Anyone without the

appropriate permissions will not be able to see your data - SigmaCERF requires a secure login and password for each session and encrypts all communication between the server using SSL. But anyone who has been given permission will be able to log on to the SigmaCERF server from anywhere on the internet, so that you can share data and collaborate with your colleagues and peers seamlessly, in real time - whether they are down the hall or across the globe.

5. Automate Compliance

The SigmaCERF electronic lab notebooks automates many of the processes that the scientist is supposed to do to help ensure that their records are properly kept - things like time and date (and author) stamping each and every entry, and tracking every change to a document, file, or entry. SigmaCERF does all of these things automatically, generating a 21CFR11 compliant audit trail for each item, so that the scientist can get back to doing what they do best - science, rather than bookkeeping.

6. Sign and authenticate asynchronously

Another thing that scientists are required to do to validate their work is to sign each experiment when they are finished - often in the presence of a witness and their supervisor. What happens in the real world is that the scientists have to wait until their witnesses and supervisors are all available at the same time - meaning that many organizations sign off (and thus authenticate) their work weekly, or worse - monthly.

With SIGMACERF, the scientist simply presses the SIGN button and enters their encryption password when they are done with an experiment. The SigmaCERF system itself acts as witness, and supervisors can sign off - digitally - when they receive the in-system notification - regardless of whether they are in the same building or even on the same continent. And this is all in compliance with 21CFR11 - so you can sign and authenticate your work immediately - and then get right back to work.

7. Access from anywhere

The SigmaCERF notebook system allows users to connect to their data - whether it's in the form of files in the content management system, or notebook pages of their own and their colleagues' - from *anywhere*. Our licensing model is by named user, rather than software installation, so you can install the SigmaCERF electronic lab notebook client on any computer your researchers may need to access - home machines, office machines, lab machines - even instrument computers, so that researchers can instantly add data while they are in the process of interpreting it.

And add that to the fact that the SigmaCERF client communicates to your SigmaCERF server using SSL over the internet, and you can feel confident that your data is safe and secure, whether your researchers are accessing the data from down the hall - or on the other side of the planet.

8. Automatic Data Collection & Processing

The SIGMACERF Automation Client lives on your machines, scanning your networked instruments and watching for new data in user-specified directories. When it detects new data, it uploads it to the appropriate location in SIGMACERF - a user's notebook or personal folder - and lets them know that their data is ready for processing. Not only does this ensure that your data is uploaded into a 21CFR11 compliant system as soon as it is finished, complete with time and date stamp, it means that the data from your instruments can instantly be examined, analyzed, and interpreted - whether you are working in the lab, office, or at home.

9. Export notebooks and data easily

Any ELN allows you to put data *into* the system. But how many of them allow you to export your data - whether it's a folder hierarchy of files, or an entire notebook with thousands of pages of experiments - in human-friendly, accessible formats? The SIGMACERF notebook system exports folders from the content management system as well as SIGMACERF notebooks as SIGMACERF archives, ready to import into another SIGMACERF server. SIGMACERF notebooks can also be exported as beautifully-rendered PDF documents - so that nobody ever loses the data because of transition. For example, if you want to give researchers, rotating students, graduate students, or Post-docs a copy of their data, they can take it with them as archives (ready for the next SIGMACERF server they work on), Zip files containing all of the actual data-files that went into their research (in their native format!), as well as PDF versions of their research notebooks. Everybody wins!

10. Cross platform

Many ELN vendors promise cross-platform support. Few deliver it, however - and only SigmaCERF is a true client-server based system (rather than a web-browser based system, with all of the inherent speed, rendering, and GUI limitations that implies). SIGMACERF runs beautifully on Windows as well as Mac OS X, so whether you use either platform in-house, or collaborate with researchers who do, you can rest assured that SIGMACERF will meet your needs today - as well as tomorrow.

11. Update painlessly

Systat Software Inc is constantly striving to improve the SigmaCERF system based on feedback from our users as well as our in-house scientific staff. And when we do release updates, you can rest assured that updating your users will be a painless process. Systat Software Inc professional support staff can remotely update your server, and as each user subsequently logs in the client software will *automatically* download the new components required to update the client - safe, secure, and simple.