



Secure Research Space (SRS)



Researchers at the University of North Carolina have developed the Secure Research Space, which integrates virtual appliances, secure workspaces, secured management and transport of data, and automated deployment and take down of resources. This combination yields a unique framework for providing a distributed technical infrastructure that addresses the core issues encountered in constructing and maintaining data-driven research collaborations.

Benefits

The UNC technology focused on several key issues:

- Security around and within collaborations
- Simple peer-to-peer data-sharing
- Cloud infrastructure provisioning

Alternative solutions focus on data integration or data centralization instead of collaboration-wise security/sharing. Additionally, the SRS allows for standardizing security protocols and data usage agreements, greatly increasing the likelihood of collaborations being formed.



For More Information

If you would like more information about this technology or UNC - Chapel Hill's technology transfer program, please contact:

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The Technology

Research, whether it is academic or industry-based, increasingly requires collaboration between multiple groups where the collaborations are characterized by conducting research on shared data. Such collaborations are challenging to construct and maintain as multiple issues must be resolved including the following: agreement on data usage policies, establishing trust between collaborators that data usage policies will be abided by, and providing the technical means of sharing and integrating data securely and in a time-efficient manner.

Many technical approaches have been tried to provide electronic-based infrastructure to facilitate such collaborations, but to date adoption has been limited. The reasons for failures are multiple; such as the inability of solutions to adapt to the rapidly changing requirements of researchers, infrastructure cost, infrastructure complexity, and the inability to properly address data security and data privacy concerns.

Researchers at UNC have developed a technical framework for research on data shared across entities (e.g., institutions, labs, companies). The Shared Research Space (SRS) solution offers a unique blend of multiple security, IT, and data sharing technologies. Importantly, the SRS addresses the primary issues that currently limit data sharing and is geared toward dynamic creation and management of research collaborations.

The SRS should have appeal to users of data leakage protection technologies, who also need to address data sharing. Potential product opportunities lie in providing distributed data integration, sharing, dissemination, and federation in combination with security aspects or dynamic provision of infrastructure. Federal agencies that deal with research and data storage companies are likely among those that could benefit most from adopting this technology.

Opportunity

UNC's Office of Technology Development seeks to stimulate development and commercial use of UNC-developed technologies. UNC is flexible in its agreements, and opportunities exist for joint development, academic or commercial licensing (exclusive, non-exclusive, and field-of-use), publishing, or other mutually beneficial relationships. This technology is covered by US patent WO 2014018731 A1.