



Case Study - Developing and Implementing Monash Secure eResearch Platform

Monash SeRP is a secure and high-powered online research platform that allows high volumes of data to be securely analysed and shared with approved researchers, wherever their location. It allows custodians of the research data to maintain complete visibility and control of how their data is used. Monash University collaborated with Swansea University to adapt their gold-standard eResearch platform, UKSeRP, for implementation at Monash using the principles of researcher co-design, security by design and privacy by design.

It was recognised that researchers needed a secure solution to share their data with collaborators as the risks of simply transferring files, particularly when that data was sensitive, was too great. Prof Belinda Gabbe from Monash's School of Public Health and Preventive Medicine had been working for a number of years with Swansea University's UKSeRP and proposed an instance of SeRP as a turnkey solution for the University. After a detailed analysis of various secure analysis environments available for researchers, Monash University chose Secure eResearch Platform(SeRP) as a suitable solution for collaborative sensitive data analysis.

Researcher Co-design

Monash SeRP implementation was sponsored by the office of Vice Provost for Research Infrastructure and is a joint effort of Monash eResearch centre, Helix (Monash' Health Data Platform), eSolutions and Data Protection office in partnership with the researchers. Monash SeRP implementation reference group was formed at the outset to provide research leadership into the implementation in the form of co-design advisory to the implementation team.

The primary objective of the reference group was to ensure Monash SeRP's suitability for sensitive data workloads across various faculties and research domains of the University that could be implemented in a scalable and sustainable manner. The reference group provided advice on various topics ranging from researcher requirements, process controls, governance, security and privacy assessments, technology controls, onboarding plan, operationalisation, prioritisation and partnership arrangement with Swansea University.

Throughout implementation, the reference group met regularly to review the project plan, address challenges and reprioritization as required. The reference group also served as an advocate for Monash SeRP and ran roadshows across faculties to inform and train researchers on how it could be used.

At each stage, researchers' needs were well articulated and understood through the leadership of the Reference Group. The result was a highly accessible data sharing platform that remains under the governance, visibility and control of the data custodians who choose to use the system.

Privacy by Design

Monash University values the data assets generated through research and recognises the importance of protecting and managing this data in accordance with best practice guidelines that enable research excellence, while maintaining any necessary ethical, legal and regulatory obligations. Being a part of the implementation reference group, Monash's Data Protection and Privacy Office played a key role in the development of Monash SeRP to ensure that privacy is embedded throughout the design and implementation of technology, process and governance of Monash SeRP.

A Monash SeRP Capability Statement was developed to help researchers understand not only the technical capabilities of the platform but also the suitability of SeRP for their research context and how to use it appropriately. An onboarding oversight group developed a checklist of compliance requirements and the processes to ensure data protection and privacy were considered and articulated from initial on-boarding through to archiving requirements. The result was a highly governed Monash SeRP environment that allowed researchers, as custodians of their data, greater control over what others do with their data.

Security by Design

Monash's Cybersecurity team was involved with the Swansea University team to ensure that Monash SeRP deployed all the technical and process controls expected from a robust, well protected platform. In addition, Monash's eSolutions was also able to integrate SeRP with Monash's VPN and two-factor authentication to provide secure remote access to approved researchers at any time, from any desktop at almost any location in the world.

The final result of using these three principles to develop Monash SeRP was a customisable research platform, accredited to the highest international standard, harnessing Monash's expertise and infrastructure to manage the complexities of collaborative research and data-sharing.