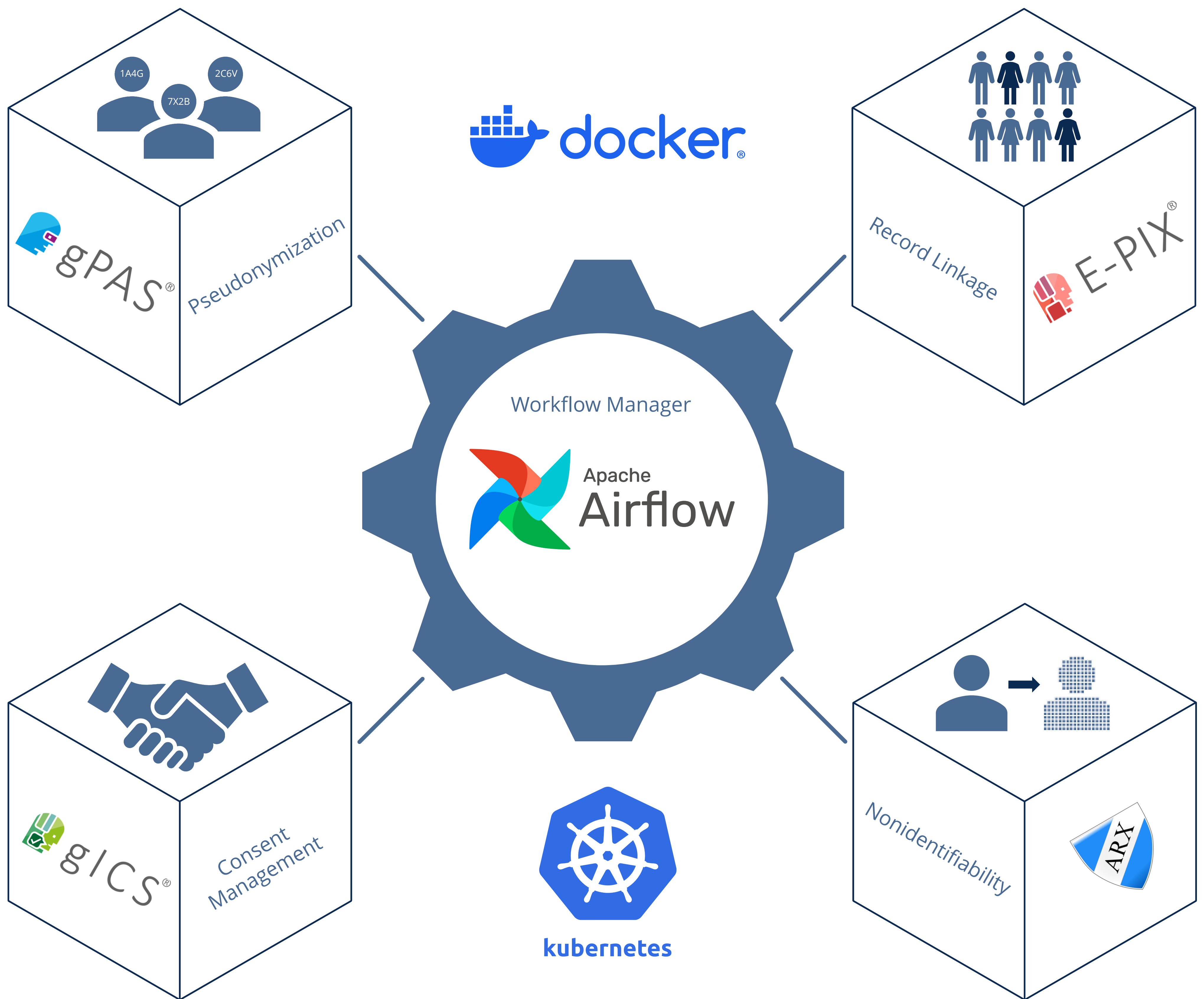


# MAST - Modular Automated System for DataTrusts

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## Motivation and Aim

- Development of a web-based modular open-source software system to minimize manual work in data trust centers by automation of time-consuming processes such as ensuring nonidentifiability, consent management, record linkage, management of data access rights and permissions
- Best practices, standards and software module to ensure nonidentifiability of personal data

## References

- Bialke, Martin, et al. "A workflow-driven approach to integrate generic software modules in a Trusted Third Party." *Journal of translational medicine* 13 (2015): 1-8.
- Hampf, Christopher, et al. "Assessment of scalability and performance of the record linkage tool E-PIX® in managing multi-million patients in research projects at a large university hospital in Germany." *Journal of Translational Medicine* 18 (2020): 1-11.
- Hauf, Diet. "Allgemeine Konzepte-K-Anonymity, I-Diversity and T-Closeness." *IPD Uni-Karlsruhe* (2007).
- Machanavajjhala, Ashwin, et al. "I-diversity: Privacy beyond k-anonymity." *Acm transactions on knowledge discovery from data (tkdd)* 1.1 (2007): 3-es.
- Majeed, Abdul, and Sungchang Lee. "Anonymization techniques for privacy preserving data publishing: A comprehensive survey." *IEEE access* 9 (2020): 8512-8545.
- Prasser, Fabian, and Florian Kohlmayer. "Putting statistical disclosure control into practice: The ARX data anonymization tool." *Medical data privacy handbook* (2015): 111-148.
- Rau, Henriette, et al. "The generic Informed Consent Service gICS®: implementation and benefits of a modular consent software tool to master the challenge of electronic consent management in research." *Journal of Translational Medicine* 18 (2020): 1-12.