Salzburg Manifesto on machine actionable Data Management Plans (maDMPs)

Over the past several years, our collaborative work has focused on building a robust ecosystem for machine-actionable Data Management Plans (maDMPs)[1] and our common goal is to transform data management by converting text-based DMPs into a format that machines can read and process. Embracing machine-actionable maDMPs isn't just a step forward in research data management; it's a leap towards a future where stakeholders experience heightened efficiency, streamlined collaborations, and accelerated innovation.

By adopting maDMPs, stakeholders empower themselves with a dynamic tool that not only simplifies data management processes but also opens up possibilities for cutting-edge automation, robust integrations, and real-time verification. This transformation isn't just about conforming to a new standard; it's about unleashing the potential for groundbreaking advancements and establishing a collective legacy of seamless, data-driven progress within the research community. Through our joint efforts and collaboration, we have established an open science-focused approach that optimizes data management planning.

Who We Are

We are representatives of DMP tools[2], chairs of Working Groups and Interest Groups at the Research Data Alliance (RDA)[3], and collaborators. Our origins lie in collaborative endeavors, such as the creation of maDMP Common Standard[4], the formulation of the *Ten principles for machine-actionable data management plans*[5], and the development of a persistent identifier for DMPs, the DMP ID[6]. This manifesto emerges from a collective effort to strengthen our collaborative community.

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[1] There are many variations of the term "Data Management Plans". We use the term loosely to describe all types of plans that are created to describe how research outputs will be created and cared for during and after research projects.

[2] Tools working together towards these goals include *DMP Tool, DMP Online, DMP OPIDoR, Argos, Digital Stewardship Wizard and many others.*

[3] More information on the Active Data Management Plans IG available at https://www.rd-alliance.org/groups/active-data-management-plans.html

[4] More information on the maDMP Common Standard available at https://github.com/RDA-DMP-Common/RDA-DMP-Common-Standard

[5] Miksa T, Simms S, Mietchen D, Jones S (2019) Ten principles for machine-actionable data management plans. PLoS Comput Biol 15(3): e1006750. https://doi.org/10.1371/journal.pcbi.1006750

[6] More information on DMP IDs available at https://support.datacite.org/docs/introduction-to-machine-actionable-dmps-madmps

Our Values

Our values are rooted in reciprocity—giving, receiving, and sharing knowledge and experiences. We aim to establish a community of practice that thrives on mutual consultation, fostering an environment where expertise is freely exchanged.

What We Stand For

This manifesto is a declaration of our commitment to working together. Our goal is to reinforce and establish a community of practice that collaborates on various commons, driving better integration and automation of Research Data Management (RDM) in the daily tasks of researchers and stakeholders.

Our Work

We actively engage in consulting, sharing knowledge, and developing commons to enable seamless integration and automation in RDM. Our ongoing initiatives include the continued development, operation, maintenance, and promotion of maDMPs and DMP IDs. We also actively work toward promoting the adoption of maDMPs among funders, tool builders, and researchers, to enhance collaboration and efficiency in the research community. Additionally, we plan to explore and contribute to novel commons, the establishment of common APIs for interoperability, the development of FAIR assessment and indicator frameworks, and potential integrations[7].

Call for Action

We invite all stakeholders to join us - participate in discussions, and contribute to the development of our shared commons - in building a future where data management is not just a requirement but a catalyst for unprecedented discoveries and collaborations. Consider attending collaborative events at RDA Plenaries[8] and the International Digital Curation Conference (IDCC)[9], and actively engage with initiatives like those found at activeDMPs.org.

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[7] Praetzellis, M, Buys, M, Chen, X, Chodacki, J, Davies, N, Garza, K, Nancarrow, C, Riley, B and Robinson, E. 2023. A Programmatic and Scalable Approach to Making Data Management Machine-Actionable. Data Science Journal, 22: 26, pp. 1–9. DOI: https://doi.org/10.5334/dsj- 2023-026
[8] More information on RDA Plenaries available at https://www.rd-alliance.org/plenaries
[9] More information on IDCC available at https://dcc.ac.uk/events/idcc