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Poster Presentation

OneDep: wwPDB System for Deposition, Biocuration, Validation of Macromolecular Structures

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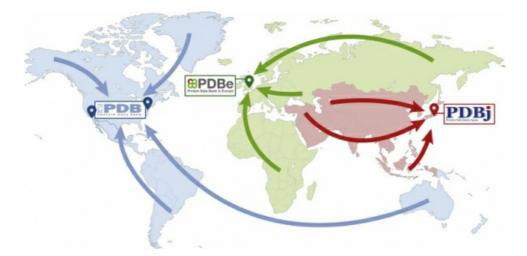
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The worldwide PDB (wwPDB) is the international consortium which manages the Protein Data Bank (PDB) - the single global repository for three-dimensional structures of biological macromolecules and their complexes. Over the past decade, the size and complexity of macromolecules and their complexes with small molecules deposited to the PDB have increased significantly. The PDB archive now holds more than 125,000 experimentally determined structures of biological macromolecules, which are all publicly accessible without restriction. These structures provide essential information to a diverse user community worldwide. There are more than 590 millions data file downloads from the PDB archive and more than 1 million unique IP addresses access the archive every year.

In an effort to meet evolving archiving requirements of the scientific community over the coming decades, the wwPDB partners have launched and continue to improve a global unified system for deposition, biocuration, and validation of macromolecular structures - OneDep. It replaces legacy pipelines across PDB, EMDB, and BMRB deposition sites and will be able to interface with other archival resources. OneDep focuses on data quality and completeness across all three archives, while supporting growth in the number and complexity of depositions.

In this poster, we describe the design, functional operation, and supporting infrastructure of the OneDep system, and provide performance assessments.

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