

An architecture for sharing HE Data

How we discover data in three easy steps

- Auto-discovery checks home page or "well known" for OPD link.
- Your OPD tells the auto-discovery where your data is published. data.ac.uk's auto-discovery programme will automatically discover and read this page to identify available data.
- The data report creator harvests data from the location published in your OPD anything from an excel spreadsheet to a RDF linked data document.

The sector challenges

In a landscape with over 1300 HE providers there is a requirement for more than 90 unique statutory reports. These reports often lead to considerable duplication in data capture and management and, in many cases, using a range of different systems generating their own challenges such as interoperability.



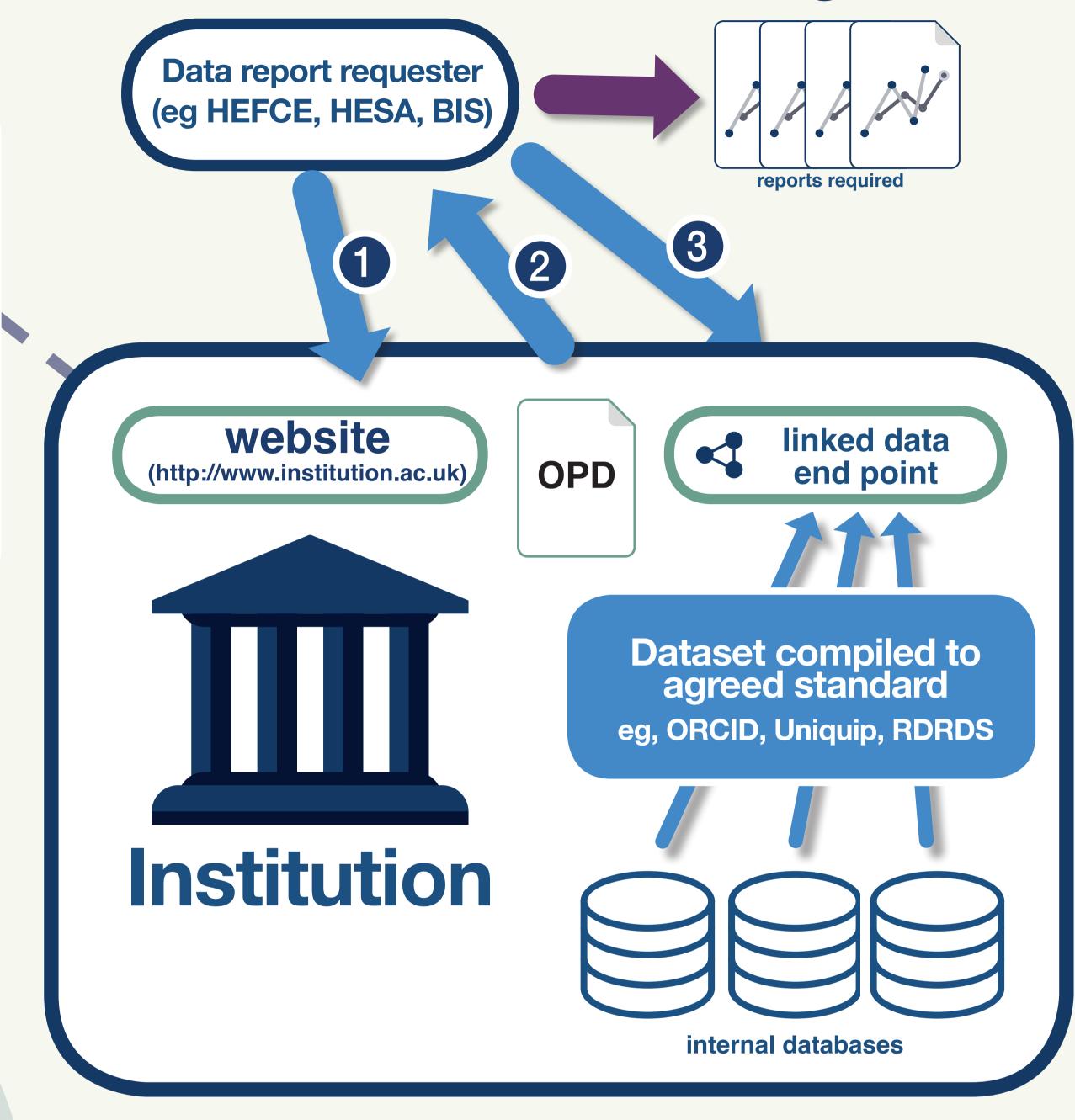








For many institutions each new report requires the compilation of a new dataset. However, we are arriving at a turning point where HEFCE initiatives, like HEDIIP, are looking to drive the changes required to address these challenges and generate new practices.



The importance of the Organisation Profile Document (OPD)

This simple script hosted on your website provides the key information of who, what, where, when and how.

Without an OPD a manual link is required which achieves a "bronze" standard under our current compliance rating. However, to enable a sustainable approach to auto-discovery an OPD is required, ideally to a "gold" standard.

To learn more about the compliance requirements go to: equipment.data.ac.uk/compliance

The tools making auto-discovery of data a reality

Sustainable linked data solutions can be adopted enabling the discovery of a range of data profiles by using the infrastructure the equipment.data project has developed. This approach avoids the need for prescribing defined systems, instead allowing data to be captured from a range of sources.

Essentially all that is required are 4 key components:

- 1. An authoritative list of institutions you wish to capture the data from (e.g. UKPRN)
- 2. Auto-discovery programming hosted by the requesting organisation (the equipment.data programming is open source)
- 3. A requirement that all reporting organisations host an OPD pointing to their data profiles, and
- 4. The data is managed/collated to required standardised profiles e.g. UNIQUIP, ORCID, Research outcomes profile (Gateway to Research) ideally managed through a standards organisation e.g. CASRAI

If it sounds simple, it is. equipment.data is using these very simple components in the discovery of research equipment data across HE.

Future data profiles could include student reporting information, course information (including CPD) and research data formalising the Digital Curation Centre (DDC) UK RDRDS metadata profile.







