

CV Integration points

The CV defines the interfaces that support mutual invocation of CV objects functionality, allowing the composition objects to support complex interactions. Examination of these interfaces permits a set of possible bindings to be derived; for each of these bindings, the interaction between the bound objects can be specified in order to define the objects' behaviour when such a binding occurs. This then serves as a basis by which to synthesise the computational behaviour of the entire RI under different use-cases. The CV describes these use cases in detail by providing six integration models. These interactions can occur between lifecycle phases provided by a single RI, but also allow integration of components provided by third parties. The interactions define compound bindings between objects that allow the movement of scientific dataset between different parts of a research infrastructure.

- **CV Brokered Data Export** (the export of user-requested data)
- **CV Brokered Data Import** (the import of user-provided data)
- **CV Brokered Data Query** (the querying of curated data by users)
- **CV Citation (the resolution)** of data and resources cited in publications)
- **CV Instrument Integration** (the integration of new instruments for data acquisition into the infrastructure)
- **CV Raw Data Collection** (the acquisition of raw data from integrated data sources)

The aggregation of these core interactions form a minimal computational model for environmental science research infrastructures that can be used as a starting point for modelling real infrastructures.