

Enabling Ongoing Access to Data Products and Services When Dependencies are No Longer Supported

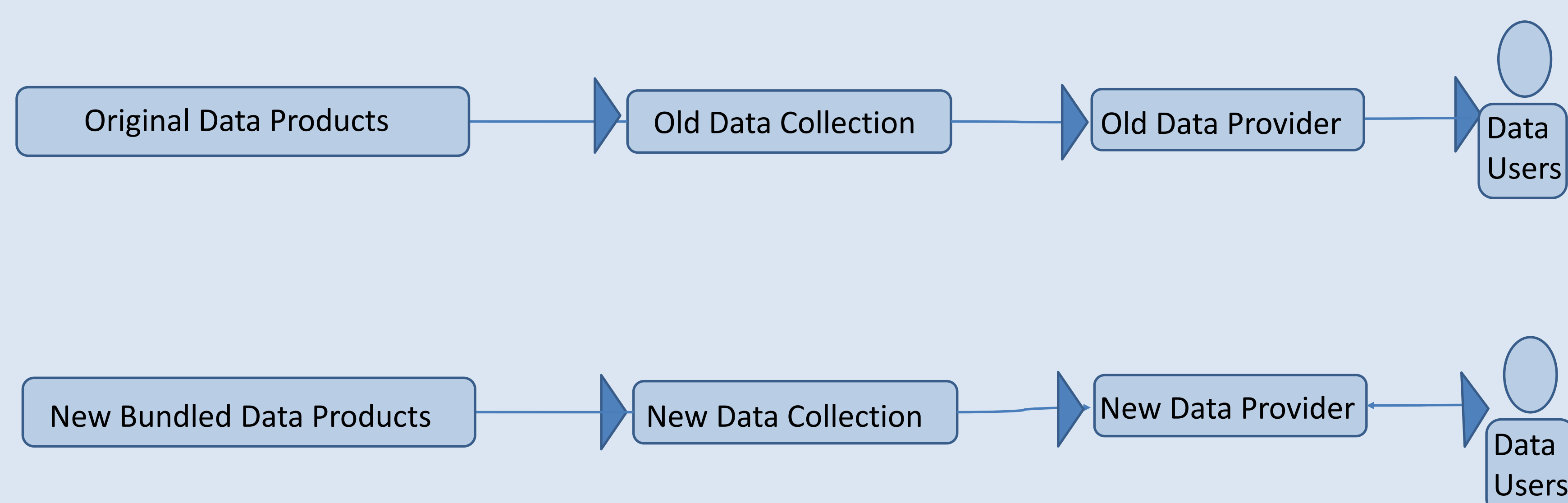
Robert R. Downs¹

¹Center for International Earth Science Information Network (CIESIN),
Columbia University, rdowns@ciesin.columbia.edu

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Online Access to Data Products Produced by Several Research Teams



Replacing Data Provider to Rescue and Provide Continuing Access to Data

End of Data Product Dissemination

Data products produced as part of a program involving several research teams are accessible online by a large community of users for several years. The data have been cited in several reports and papers that have used the data to conduct published studies. The funding that supports the operation of the services that enable access to the data is no longer provided. The services that provide access to the data are removed and the data products are no longer available.

Identification of an Alternate Service Provider

Recognizing that the loss of access to the data products by the community is unacceptable, an alternative data provider assesses the data products and proposes to provide the services necessary to restore capabilities for the community to access the data products.

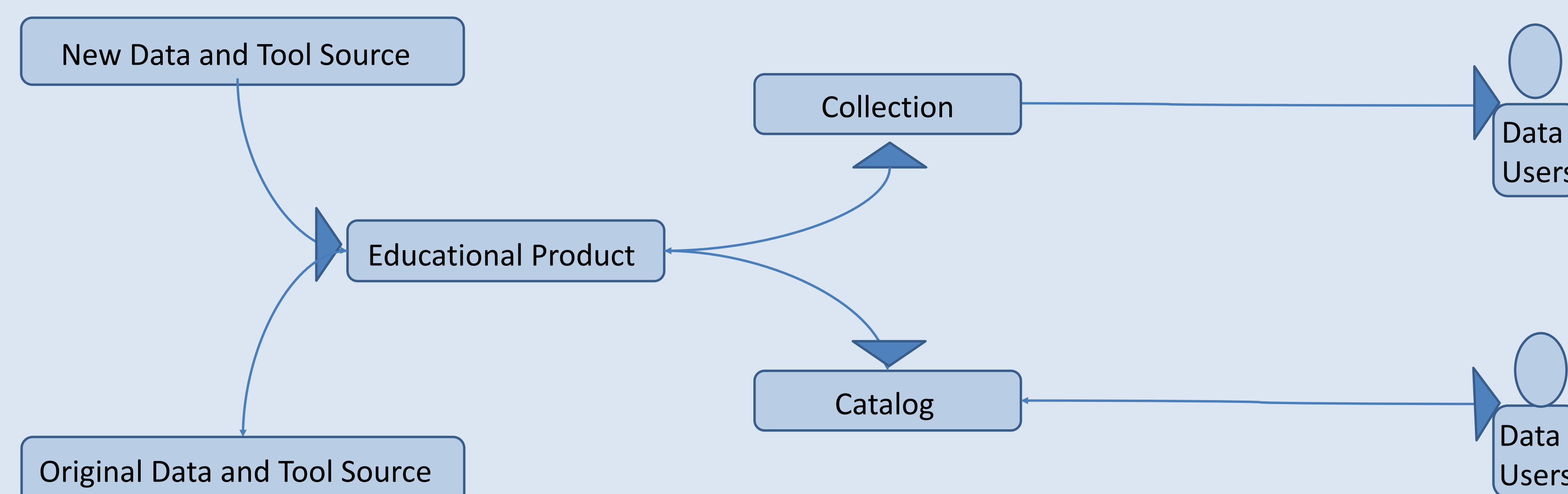
Data Rescue by Enabling Access to Bundled Data Products

Discovering that the data products and services have not been adequately curated, the new data provider completes the data rescue effort by bundling the data products into collections that include the documentation that is currently available from the original provider and the authors of the data products.

Abstract: Online scientific data and related products and services can be developed in a distributed manner across systems and organizations, creating dependencies that rely on continuing operations of coordinated services over time. Dependencies can include other online products and services that rely on disparate chains of hardware and software maintained by separate organizations with independent operational capabilities, support, and sustainability models. In the future, some aspects of such distributed networks of dependent capabilities may fail, requiring mitigation to maintain the online capabilities that users expect.

Case studies are offered to describe opportunities for enabling continuing access to scientific data products and services that are dependent on external systems that may no longer be viable.

Online Educational Product Enabling Access to Tools and Data



Replacing Data Products and Services Offered Within Educational Product

End of Data Product and Service Scheduled

An online educational product that is part of a suite of educational products for use by teachers and students in the classroom enables access to curriculum material, scientific data, and tools that can be used online to analyze the data interactively. An upgrade of the operating system in the facility that hosts the data and tools requires abandoning the capabilities to enable access to the data and tools.

Delay End of Service

The upgrade of the system that hosts the data and tools is delayed to accommodate the need to replace access to the data and tools needed for the use of the online educational product. The delay provides time to search for a new provider of the data product and services needed to support the continuing use of the educational product.

Substitution of Access Services for Data and Tools

Another provider of the data product and analytical tools is identified. The new provider is asked for permission to point to their online data products and services from the online educational product. Permission also is obtained to include screen shots from the new provider's website within the educational product. The educational product is modified to revise the instructions for using the data product and services so that the instructions are consistent with the use of the substitute data product and services offered by the new provider. Attribution statements within the educational product are modified to cite the data product and services offered by the new provider.