Reusable Component Services

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Accessing Reusable Component Services

RCS on Internet:

www.epa.gov/rcs

Stewards may manage their records by selecting the Login for EPA and Partners.

For More Information

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Reusable Component Services (RCS) is a catalog of a broad range of Information Technology (IT) resources and services. Supporting EPA, states, and tribes, RCS provides a single point of discovery for Web services, widgets, XML schema, and other IT assets. By raising awareness across EPA and its partner organizations, RCS can promote reuse of these IT components to help reduce costs, speed development, and produce higher-quality systems and applications. RCS provides a clearinghouse of information about EPA’s IT resources so that future development of applications, databases, and architecture leverages previous work and lessons learned. RCS therefore is a critical component of the Exchange Network, whose goal is to promote sharing and exchange among its partner organizations. RCS also catalogs relationships among IT resources.

Background

EPA program offices and state and tribal partners are continually creating new tools or modifying or enhancing existing systems or services. These innovations and changes may include new web services or mobile applications for delivering data, electronic tools for gathering data, or better services for managing data. In a time of tight budgets, it is critical to reduce duplicative efforts, and EPA and its partners need to identify opportunities to reuse resources previously developed. RCS helps by registering reusable resources in one location for easy discovery, access, and use.

Components

Some of the asset types that are being catalogued in RCS are:

* **Web Services** – metadata about web services with links to  
   Exchange Network Discovery Services and others;
* **Code Libraries** and other Application Programming Interfaces  
   (**APIs**)- automated ways to access specific functionality in a  
   software tool or application;
* **XML Schema** and **Data Flows** – for EPA and the Exchange  
   Network;
* **Software Tools** **and Mobile Applications** – developed by EPA and  
   partners and available for sharing and re-use;
* **Data Models** – underlying data structures for systems and  
   applications;
* **Blocks of Code and Development Projects** – pieces of programming code that may be used in building other applications and complete project code;
* **Datasets** – links to data sets so they can be used by applications; and
* **Widget Tools** – available functions for web pages and web applications.

Services

RCS allows users to:

* **Discover** –search and browse registered components and services;
* **Access** –view and download components and services through applicable agreements;
* **Register** –add entries for components and services with metadata, relationships and classifications to aid discovery;
* **Subscribe** – receive notifications about new or updated components and services;
* **Collaborate** –exchange information, e.g., questions, answers, needs, and solutions; and
* **Relate** – create and show relationships among registered resources.

Current Activities

Current activities for RCS include:

* Identification and registration of technology resources across EPA and its state and tribal partners;
* Enhancements to support EPA’s Developer Central and significant improvements to usability and performance;
* Demonstrations and training sessions with EPA programs and partners to show the application and how it can be used to save development money and increase quality;
* Agreements are being sought with groups from EPA and partners to link and harvest their existing registries and repositories automatically to RCS, thereby providing centralized discovery while minimizing manual entry.

Future Activities

In the future, RCS will:

* **Add Resource Types** – identified as critical by stakeholders, including data dictionaries, templates, and linked datasets;
* **Link to and Integrate with Other Registries and Repositories** – to promote sharing and reduce redundancy;
* **Provide Automated Services** – to maintain EPA and partner web pages and applications in one place; and
* **Provide access to other resources** – federal, state, tribal, industry or academic, to encourage collaboration amongst EPA partners.