

Collaborative model interweaves e-services

Coordinating e-services

Doing business online means depending on a variety of e-services. Coordinating those services, each of which may work on a proprietary platform, can require a level of IT expertise beyond the scope of small- to mid-size companies. Even large enterprises, who invest significant resources in integrating these different platforms, often find that manually blending a group of e-services does not take full advantage of each individual service's technology.

ACSI (Artifact-Centric Service Interoperation) automates the blending process. Now numerous e-services can work together, combining separately managed functions to achieve shared business goals.

Why we need ACSI

A company that coordinates conference and convention events, for example, needs a broad variety of e-services to manage scheduling, catering, decorations, lodging, transportation, finances, and more. Many of these e-services are operated by third parties. The activity of these e-services will be interleaved in intricate ways, and will typically need adjustments—both manual and automated—as the event progresses.



With today's technologies, coordinating these myriad e-services usually involves the development of proprietary and *ad hoc* systems that require considerable expertise to create and maintain. More often than not, these systems are application-specific and do not have the flexibility to scale up when the number of customers or incorporated services increases significantly.

Blending e-services

ACSI provides an open-source platform so businesses can easily create or join an existing blend of e-services.

Because individual services are operated by different types of organizations with unique core competencies, developing an application to blend them is next to impossible. Any application sophisticated enough to fully support each service's capabilities would not be flexible enough to support the variations that stem from different geographical regions or shifts in the marketplace.

ACSI overcomes these challenges and offers a way to blend e-services that is not only comprehensive, but adaptable, easily enabling data sharing among services, and scaling up as business expands.

Who can benefit from ACSI?

- Government
- Energy
- Healthcare
- Supply chain logistics
- Heavy manufacturing
- Human resources
- Any private industry that uses multiple e-services
- Any organization that depends on data transfers among different systems, even internal

What can ACSI do for you?

- Save time, money, and effort
- Improve design, deployment, and operations phases—leading to more and better innovations
- Support a large number of service collaborations
- Keep multiple and varied tasks focused on overall goals

How does it work?

ACSI is based on two fundamental concepts: the interoperation hub and dynamic artifacts. An interoperation hub serves as a virtual rendezvous for multiple services that work together toward a common goal. **ACSI** is an easy-to-use framework for creating, deploying, and joining such hubs.

The hubs used in **ACSI** are structured around dynamic artifacts, also known as business artifacts or business entities. These artifacts provide a holistic marriage of data and processes, serving as the basic building block for modeling, specifying, and implementing services and business processes.

Reducing costs

ACSI technology results in a simple and streamlined way to blend e-services, typically costing 40% less than manually creating such a blend. **ACSI** leads to further savings by enabling automation of about 90% of the data transformations needed to support the blends, significantly simplifying the process as compared to conventional methods.

Simple and scalable

ACSI will be provided as an SaaS—Software as a Service, enabling a pay-per-use model. This scalability and simplicity make it just as relevant for small organizations as for large enterprises.

Ultimately, **ACSI's** interoperation hubs can be placed into a cloud to provide data storage and task executions on behalf of the participating services.

And once the system is in place, **ACSI's** capabilities extend beyond e-service blends. The platform enables the effective management of all data underlying the business processes.

In short...

ACSI is expected to drive online businesses into a new era of simplified and cost-effective collaboration. Businesses, both large and small, can retain a laser focus on operations and goals, as they achieve new efficiencies using cooperative e-services.

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The ACSI Consortium

ACSI is developed by an EU-funded consortium:



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Together, these world-class researchers have expertise in business process management, artifact-centric business processes, verification, data integration and ontologies, process mining, and services architectures.

