



Why Web Services?

A Web Service is a software system designed to support interoperable machine-to-machine interaction over a network. In other words, Web Services allow different software systems to talk to each other over the Internet, without human intervention. Web Services are being used everywhere you look on the internet today. Whenever you see a Google Map embedded on another website or you see pictures from Flickr on a friend's homepage, you are seeing web services in action.

At BTI we view Web Services as a critical piece of the **Software Infrastructure** of the Intelligence Community. Consider the infrastructure required to deliver electrical service to your home. There have to be electrical lines running all the way from the source of the power to your home, and the home of every other member of the community. There may be many companies who'd like to provide you electrical services, but it doesn't make sense for all of them to build their own power lines.

In the same way, there are a lot of requirements that are common among software systems within the Intelligence Community such as authentication, knowledge management, classification, and information storage. It doesn't make sense for every software development team to reinvent the wheel unless you are making a better wheel.

BTI has developed the **silos2services** methodology to transform disconnected applications into collaborative software systems. Architecting your software systems in this way provides for the following advantages:

- **Reusability:** Reusing existing software components increases reliability, saves development time, and saves money.
- **Maintainability:** Highly maintainable software is easy to develop and modify, with minimal risk and impact to existing users.
- **Scalability:** Highly scalable software is able to handle increasing amounts of work and users efficiently without negatively affecting performance.
- **Interoperability:** Interoperable software that uses platform and language independent protocols works well with existing, as well as new software components.