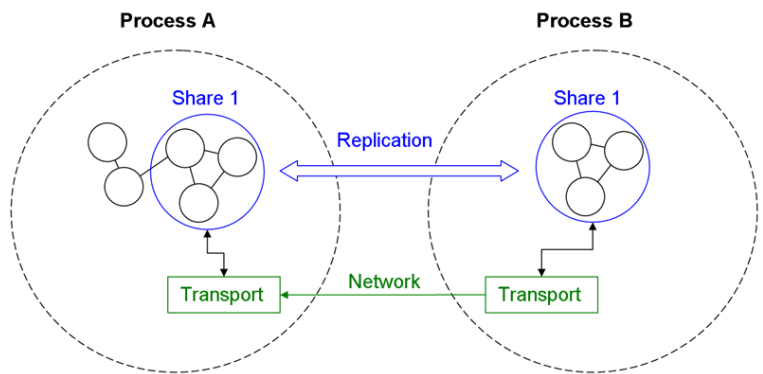
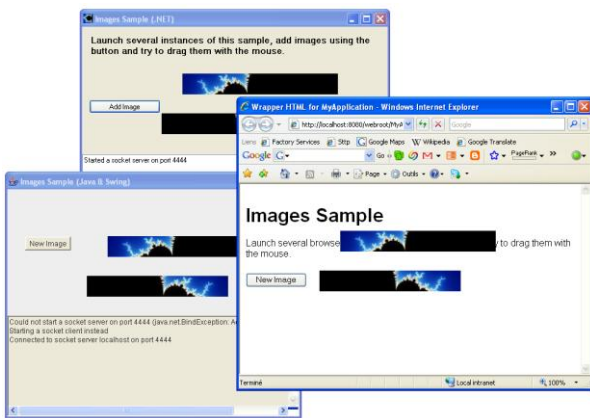


**XSTM** is an open source library which enables high performance object replication between processes.

Our model is based on **object shares**, which work like file shares. When an object is added to a share, it appears on the other machines which have the same share opened. Modifications done to the fields of the object are then replicated between machines.



**XSTM** is made of three projects. A Java implementation called **JSTM**, a port to **.NET** called **NSTM** and an adapted version for the **Google Web Toolkit** which allows replication to browsers for **Ajax** applications.



Our **Images Sample**: Three applications in Java, .NET and GWT synchronized with each other.



All implementations are compatible with each other so object replication can take place e.g. between a Java server and a .NET Smart Client.

- A replicated object can replace a complex service, saving you from sending update messages, copying fields from objects to messages and back, handling conflicts etc...
- Objects are modified using transactions (**XSTM** is an extended **software transactional memory**).
  - ⇒ If a network failure or conflict occurs, your objects are cleanly roll-backed to a consistent state.
  - ⇒ Transactions are fully isolated from each other, which simplifies a lot concurrent and distributed programming. Think of this as source control for objects: Starting a transaction takes a snapshot of your objects from which you can work as if there was only one thread or one machine. When you are done, commit the transaction to merge your modifications to the objects.
- High performance: for simple transactions, around 500,000 transaction/s on one machine and 20,000 over a network.

Download our **free e-Book!**

