# OpenDOF Project™ "One Page" IoT

## Bryant Eastham, Panasonic

```java
private static class ProvideListener extends DOFObject.DefaultProvider {
    public void get( Provide op, DOFRequest.Get request, Property property ) {
        request.respond( new DOFUInt8( 0 ) );
    }
}

private static class QueryListener implements DOFSystem.QueryOperationListener {
    public void interfaceAdded( query, oid, iid ) …
    public void interfaceRemoved( query, oid, iid ) …
    public void providerRemoved( query, oid ) …
}

DOFObjectID.Domain domain = DOFObjectID.Domain.create( "[6:bar.com]" );
DOFObjectID.Identity identity = DOFObjectID.Identity.create( "[3:foo@bar.com]" );
DOFCredentials user = DOFCredentials.Password.create( domain, identity, "password" );

DOF.Config dofConfig = new DOF.Config.Builder().build();
DOFSystem.Config sysConfig = new DOFSystem.Config.Builder().setCredentials( user ).build();

DOF dof = new DOF( dofConfig );
DOFSystem system1 = dof.createSystem( sysConfig );
DOFSystem system2 = dof.createSystem( sysConfig );

DOFObjectID oid = DOFObjectID.create( "[2:{d0 67 e5 43 f8 ff}]" );
DOFObject requestor = system1.createObject( oid );
DOFObject provider = system2.createObject( oid );

DOFOperation provide = provider.beginProvide( Status.DEF, new ProvideListener() );

DOFAddress me = InetTransport.createAddress( "0.0.0.0", 3567 );
DOFServer.Config config = new DOFServer.Config.BuildSecureStream( me, user );
DOFServer server = dof.createServer( config );
server.start( timeout );

DOFAddress other = InetTransport.createAddress( "host", 3567 );
DOFConnection.Config config = new DOFConnection.Config.BuildSecureStream( other, user );
DOFConnection connection = dof.createConnection( config );
connection.connect( timeout );

DOFOperation interest = system1.beginInterest( oid, Status.IID, DOFInterestLevel.WATCH );
DOFQuery query = new DOFQuery.Builder().addFilter( oid, Status.IID ).build();
system1.beginQuery( query, new QueryListener() );

DOFResult<DOFValue> result = requestor.get( Status.VALUE, timeout );
int value = DOFType.asInt( result );
```
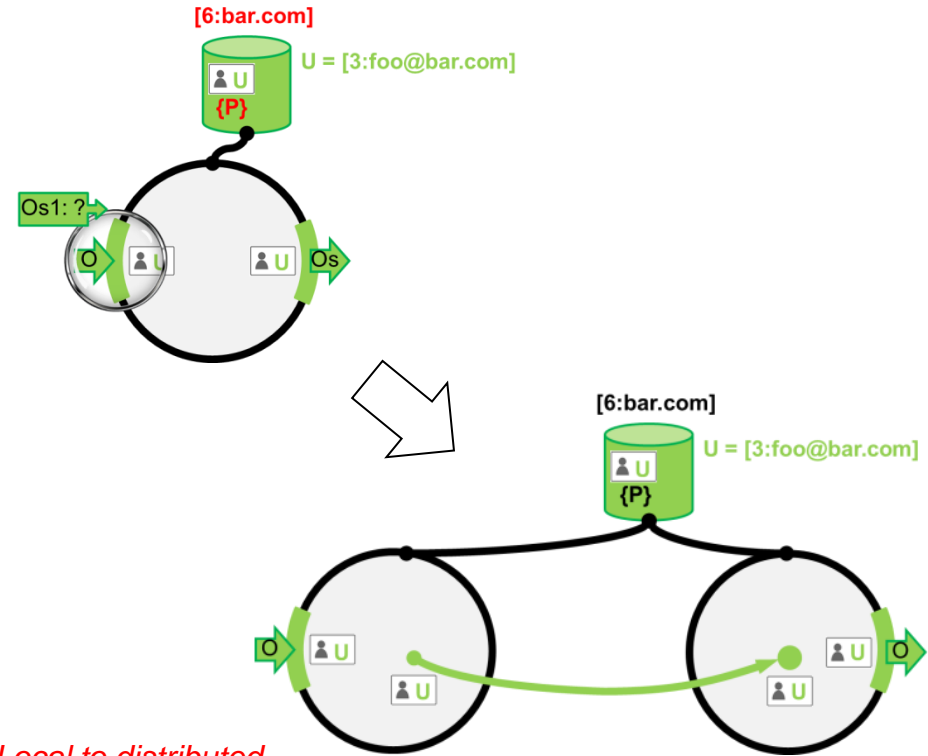
*Local to distributed in 8 lines of code.*



**Open** **D**istributed **O**bject **F**ramework

www.opendof.org       Java, C99, C#