

# MerlinStandaloneExample

## Merlin Standalone Example

This example shows how to start up Merlin in your own "main" class.

```
/*
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 */

package tutorial;

import java.io.File;
import java.util.Map;

import org.apache.avalon.repository.Artifact;
import org.apache.avalon.repository.provider.Builder;
import org.apache.avalon.repository.provider.Factory;
import org.apache.avalon.repository.provider.InitialContextFactory;
import org.apache.avalon.repository.provider.InitialContext;
import org.apache.avalon.repository.main.DefaultInitialContextFactory;
import org.apache.avalon.repository.Artifact;

/**
 * An example of the embedding of a merlin kernel inside a main
 * method. The objective of the example is to demonstrate a
 * simple embedded scenario.
 */
public class Main
{
    public static void main( String[] args ) throws Exception
    {
        //
        // Create the initial context factory. This establishes
        // the application group from which properties will
        // be resolved. It also provides operations supporting
        // customization of the application environment.
        //

        InitialContextFactory initial =
            new DefaultInitialContextFactory( "merlin" );
        File home = initial.getHomeDirectory();
        initial.setCacheDirectory( new File( home, "system" ) );
        InitialContext context = initial.createInitialContext();

        //
        // Using the initial context we can now load any repository
        // application using an artifact specification. Meta
        // information associated with the artifact is used to
        // construct the classloader that the application needs in
        // order to execute.
        //

        String spec = "artifact:merlin/merlin-impl#3.3-SNAPSHOT";
        Artifact artifact = Artifact.createArtifact( spec );
        Builder builder = context.newBuilder( artifact );
    }
}
```

```
//  
// With the classloader established we can go ahead and  
// and get the application factory. The factory has already  
// been parameterized with defaults derived from properties  
// based on the application group. We can provide  
// overriding values by setting the factory criteria to  
// application specific values following which we instantiate  
// the application.  
//  
  
Factory factory = builder.getFactory();  
Map criteria = factory.createDefaultCriteria();  
factory.create( criteria );  
}  
}
```