



IBM Software Group

Migrating to Express Runtime V2.1

IBM Virtual Innovation Center



IBM Express Runtime

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Objectives

- **Discuss the migration path for Express Runtime**

Agenda

- **What to migrate?**
- **Migration path**
- **Updating wrapper files**
- **Generating the solution**

What to migrate?

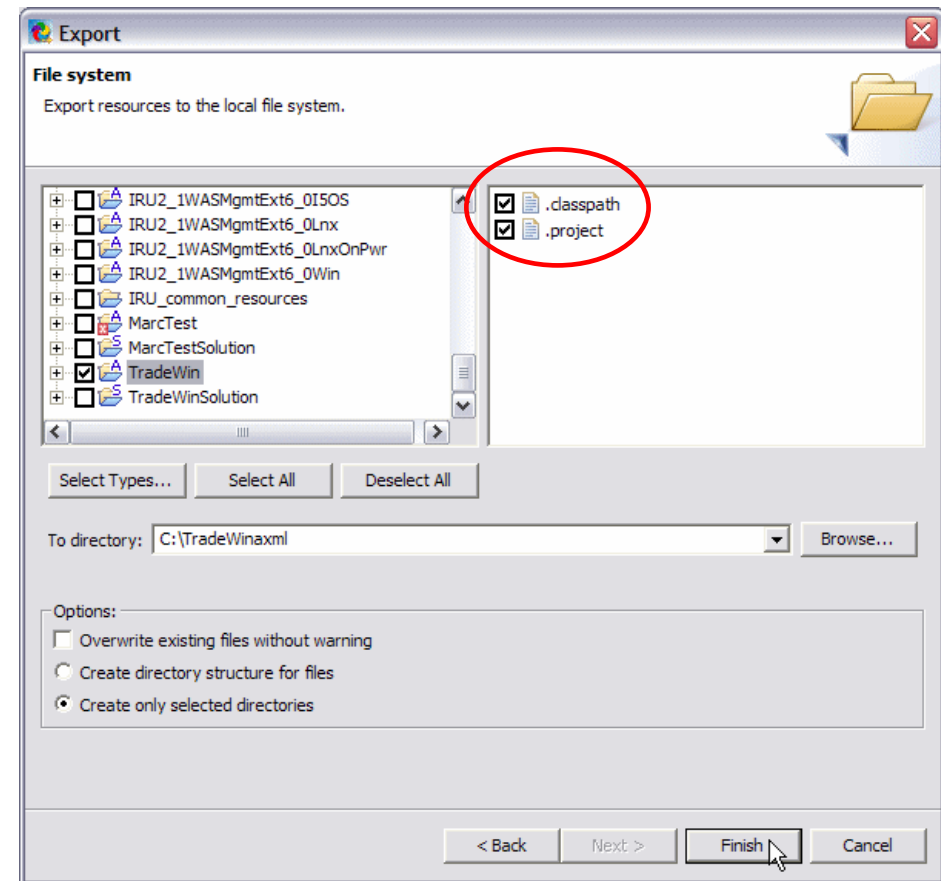
- **Application and solution projects**
- **No migration for the middleware components**
 - Express Runtime V2.1 comes with the new version of all middleware components
 - You install and use new middleware wrappers from Express Runtime V2.1

Steps in migration path

- **There are 5 major steps in this path**
 - Export your existing application or solution projects from Integrated Runtime 1.1
 - Import these application or solution projects in Express Runtime Developer
 - Update the application and solution wrappers
 - Migrate your Web application to the specification level supported by the version of the middleware included in Express Runtime 2.1
 - Generate a solution in Express Runtime 2.1

Step 1 – Exporting a project

- **Moving projects to another physical system**
 - Export projects to a removable media (**File->Export->File System**)
 - Need to include **.classpath** and **.project** files
 - Including the **bin** folder is optional



Step 2 – Importing a project

■ Migrating projects from IR to ER

- Import projects to be migrated
 - Use **File->Import->Existing Project into Workspace**
- Express Runtime Developer adds new XML tags and updates classpath information
- It does not move or copy the project's files physically
 - If it is needed to have the project's files residing in the target workspace folder, copy or move the project folder into the target workspace folder, then import the project from that location.

Step 3 - Updating wrapper files

- **Review and update wrappers after importing the project**
 - Check and ensure correct values are used after the import process
 - Add information to the optional attributes
 - Remove deprecated tags in the wrappers using the **Source** tab in the wrapper editor
 - Deprecated tags are listed in **Problems** view
 - Wrapper still works even if deprecated tags are not removed

Step 3 – Identifying the problems with a wrapper

ER reports the problems with the project you're migrating

The screenshot shows the Express Runtime Developer interface. The Package Explorer on the left displays a project named 'HelloWorld' with various source files and external support jars. The main editor shows the 'application.xml' file with the following XML content:

```
<?xml version="1.0" ?>
<iru:application
  builderVersion="3.0"
  debug="true"
  id="HELLO"
  xmlns:iru="http://www.ibm.com/xmlns/prod/iru/application"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ibm.com/xmlns/prod/iru/application ..
  >
  <applicationInformation
    installSize="9000"
    version="1.0">
    <operatingSystems>
      <operatingSystem>Windows</operatingSystem>
    </operatingSystems>
  </applicationInformation>
</iru:application>
```

The Problems view at the bottom shows 66 errors, 10 warnings, and 0 infos. A red arrow points from the text on the left to the first error in the list:

Description	Resource	In Folder	Location
Project HelloWorld is missing required source f...	HelloWorld		
The project cannot be built until build path err...	HelloWorld		
The attribute "programName" is required.	application.xml	MarcTest/src/MarcTest	
TradeWinCommon cannot be resolved.	TradeWinMai...	MarcTest/src/MarcTest/userProg...	line 42
TradeNLSKeys cannot be resolved	TradeWinMai...	MarcTest/src/MarcTest/userProg...	line 67
TradeNLSKeys cannot be resolved	TradeWinMai...	MarcTest/src/MarcTest/userProg...	line 105
TradeNLSKeys cannot be resolved	TradeWinMai...	MarcTest/src/MarcTest/userProg...	line 125
TradeNLSKeys cannot be resolved	TradeWinMai...	MarcTest/src/MarcTest/userProg...	line 135
TradeWinCommon cannot be resolved	TradeWinMai...	MarcTest/src/MarcTest/userProg...	line 202

Step 4 – Updating your Web application

- **Express Runtime 2.1 includes the newer versions for all middleware components**
 - WebSphere Application Server – Express supports J2EE v 1.4
- **Make sure your Web application, that you wrap into the solution, conforms to the new level of specifications**
- **Use Rational Web Developer to perform this task**

Step 5 - Generating a solution

- **Generate your applications and solutions using Express Runtime Developer**

End of the Module