



IBM Software Group

Troubleshooting

IBM Virtual Innovation Center



IBM Express Runtime

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Objectives

- Help you figure out problems that may arise during installation, development, and deployment
- Explain where you can report problems and get help

Agenda

- Log files to identify problems
- Product support documents contained in IBM Express Runtime
- Where to find more help

Log files to identify problems

Log files – Help you find problems

- **ER creates several log files which you can use to determine the cause of a problem**
- **Log files contain information that you may need to supply to the IBM Support Center to get more help**
- **There are three distinct phases during which Express Runtime can generate log files**
 - Express Runtime – IBM Installation Agent installation
 - Solution development
 - Solution deployment

Logs during ER installation

- **The ER installation is actually broken into two ISMP* installation phases**
 - The first phase installs the LaunchPad, which contains a link to install the rest of ER
 - The second phase is called from the Setup program to install ER components
- **All events in both phases are logged into a single log file**
`<IRU install dir>\Runtime21\SolutionEnabler \logs\IRU_Install.log`
- **Here is a sample of logs which includes date, event source, event description**

```
(Dec 7, 2004 9:20:17 AM), Setup.IBM_IRU.install, com.installshield.wizard.platform.win32.Win32ProductServiceImpl, msg1, installing Files (IRU2_1SampleWinWorkspaceSchemaFiles)  
(Dec 7, 2004 9:20:17 AM), Setup.IBM_IRU.install, com.installshield.wizard.platform.win32.Win32ProductServiceImpl, msg1, installing Files (IRU2_1SampleWinWorkspaceSupportJarFiles)
```

* InstallShield Professional - Multi-Platform Edition (ISMP) is the program that installs IBM Express Runtime

Logs during IBM Installation Agent installation

- **Installation of IBM Installation Agent (IIA) is logged into a log file located in:**

<IIA install dir>\IIA\logs\IRU_IIAInstall.log

- **This is an example of logs which include date, event source, event description**

```
(Jan 13, 2005 2:27:57 PM), Setup.product.install, com.ibm.jsdt.ismp.wizard.actions.CreateSecurityKey  
sAction, msg1, IRU08029: Security keys were created.  
(Jan 13, 2005 2:27:57 PM), Setup.product.install, com.ibm.jsdt.ismp.wizard.actions.LogFileMessage, m  
sg1, IRU08028: Install directory = /opt/IBM  
(Jan 13, 2005 2:27:57 PM), Setup.product.install, com.ibm.jsdt.ismp.wizard.actions.LogFileMessage, m  
sg1, IRU08027: Install language = en  
(Jan 13, 2005 2:27:57 PM), Setup.product.install, com.ibm.jsdt.ismp.wizard.actions.LogFileMessage, m  
sg1, IRU08036: Installation is complete.
```

Logs during ER pre-installation

- **LaunchPad or First Steps will record errors or exceptions when encountering an error**
- **Check two log files**
 - For LaunchPad
 <IRU install dir>\Runtime21\SolutionEnabler\logs\IRU_LaunchPad.log
 - For First Steps
 <IRU install dir>\Runtime21\SolutionEnabler\logs\IRU_FirstSteps.log

Logs during solution development

- **Three tools will generate log files when building a solution**
 - The application generator
 - To compile the application wrapper and build manifest files
 - The solution generator
 - To compile the solution wrapper
 - The deployment package generator
 - To create the user JAR files

Logs created by the application generator

- **The log file is:**

`<application project>\bin\ <application id>\log\applicationBuilder.log`

- **The application generator writes status and error information to this log file as it creates the application .ser file.**
- **In addition, Extensible Markup Language (XML) parser information about the application wrapper is written to this file.**

Logs of the solution generator

- **The log file is:**
`<solution project>\bin \log\solutionBuilder.log`
- **The Solution generator writes status and error information to this log file as it creates the solution .ser file.**

Logs of the deployment package generator

- **The log file is:**

deploymentPackageBuilder.log

- If it's created under a solution package, it will be in

 - `<solution project>\bin\<application id>\log`

- If it's created under an application package, it will be in

 - `<application project>\bin\<application id>\log`

- **The deployment package generator writes status and error information to this log file as it creates the user JAR file.**

Logs during deployment

- **There are four types of log files**
 - Express Runtime
 - IBM Installation Agent
 - User Program Debugging
 - Application

Logs of Express Runtime

- **The log file is**

<IRU install dir>\Runtime21\SolutionEnabler\logs\IRU_DeploymentWizard.log

- **This log file contains messages and exceptions and is stored on the staging server**

- It includes local and remote deployment messages

- **Another file is stored on target system during remote deployment**

<IIA install dir>\IIA\logs\IRU_DeploymentWizard.log

Logs of IBM Installation Agent

- **Print instructions from your user programs are logged in this file and include**
 - Data that user programs write to either System.out or System.err
 - Exceptions from your user programs
- **Find it in the following location**
 - On a staging server
`<IRU install dir>\Runtime21\SolutionEnabler\logs\IRU_IIATrace.log`
 - On a target system
`<IIA install dir>\IIA\logs\IRU_IIATrace.log`

Logs of User Program Debugging

- **This log file can be used for debugging user programs**
 - Contains the command line call of the most recent user program
 - You can run this command string from a command prompt to start the user program directly

- **Find this log file in the following location**
 - On a staging server
`<IRU install dir>\Runtime21\SolutionEnabler\deployment\logs\ibmnsi.log`
 - On a target system
`<IIA install dir>\IIA\logs\ibmnsi.log`

Logs of Application

- **The creation of logs is controlled by the application wrapper and the user programs**
- **Each of the different types of user programs can create a log file according to *logFile* attribute in the application wrapper**
- **Review different log files in the following location**
 - On a staging server
`<IRU install dir>\Runtime21\ SolutionEnabler\deployment\logs`
 - On a target system
`<IIA install dir>\IIA\deployment\logs`

Product support documents contained in ER

Documentation for Express Runtime

- **After Installation on your system, you can find online documentation:**

- Windows

Start → Programs → IBM Express Runtime 2.1 → Product Documentation

- Linux

Start here → applications → programming → First Steps → Product Documentation

Documentation for IIA

- **After Installation on your system, you can find online documentation:**

- Windows

- Start → Programs → IBM Installation Agent 3.1 → Overview

- Linux

- Start here → Applications → Programming → First Steps → Product Documentation

Documentation for Console for Express Runtime

- **After Installation on your system, you can find the online documentation:**

- Windows

Start → Programs → Console for Express Runtime → First Steps → Product Documentation

- Linux

Start here → Applications → Programming → First Steps → Product Documentation

Where to find more help

Documentation for DB2 Express

- **Linux and Windows**

<http://www.ibm.com/software/data/info/db2express>

- **iSeries**

<http://www.ibm.com/servers/eserver/series/db2/>

- **After DB2 Express is installed, you can access its documentation through menu shortcuts:**

- Windows

Start → Programs → IBM DB2 → Information → Information Center

- Linux

Start → Programs → IBM DB2 → Information → Information Center

Documentation for WAS Express

- **Linux and Windows**

<http://www.ibm.com/software/websphere/info/express/index.jsp>

- **iSeries**

<http://www.ibm.com/servers/eserver/series/software/websphere/wsappserver/>

- **After WAS Express is installed you can access its documentation through menu shortcuts:**

- Windows:

Start → Programs → IBM WebSphere Application Server - Express 6 → Information center/Online support

- Linux:

Start → Programs → IBM WebSphere Application Server - Express 6 → Information center/Online support

- **JACL: A TCL implementation in Java**

http://www.usenix.org/publications/library/proceedings/tcl97/full_papers/lam/lam.pdf

Documentation for IHS

- **Linux and Windows**

<http://www.ibm.com/software/webservers/httpservers/>

- **iSeries**

<http://www.ibm.com/servers/eserver/series/software/http/>

- **After IBM HTTP Server is installed you can access its documentation through menu shortcuts:**

- Windows

Start → Programs → IBM HTTP Server → Documentation

- Linux

Start → Programs → IBM HTTP Server → Documentation

Reporting Problems

- **Please visit Virtual Innovation Center (VIC) if you still have issues that you cannot resolve by checking log files**

<http://www.ibm.com/partnerworld/vic>

- **The VIC is the online resource where you can look up the most current issues**
- **You can also request live support for Express Runtime**

End of the module