

**Chapter
2**

**NET EXPRESS
PROJECTS**

*Get on the
Fast Track!*



TM

**SYS-ED/
Computer
Education
Techniques, Inc.**

Objectives

You will learn:

- How to create and edit a project.
- Loading and compiling a project with a simple COBOL program.
- Determining compile time errors and fixes.
- Executing a simple console program.
- Testing a simple console program.



1 IDE: Integrated Development Environment

The IDE integrates the tools needed for editing, compiling and debugging COBOL applications. This is also known as "animating".

A project is a file detailing all the files in an application, and how they should be compiled. It is similar to a make file in UNIX or JCL catalog procedure on a IBM mainframe system.

- A project is recognizable by the extension .app at the end of its name.
- The project is created and maintained in the IDE.
- The folder where the project for an application is kept is known as the project folder.
- The default workarea is d:\NetExpress\Base\Workarea.

1.1 Steps in Program Development - Typical

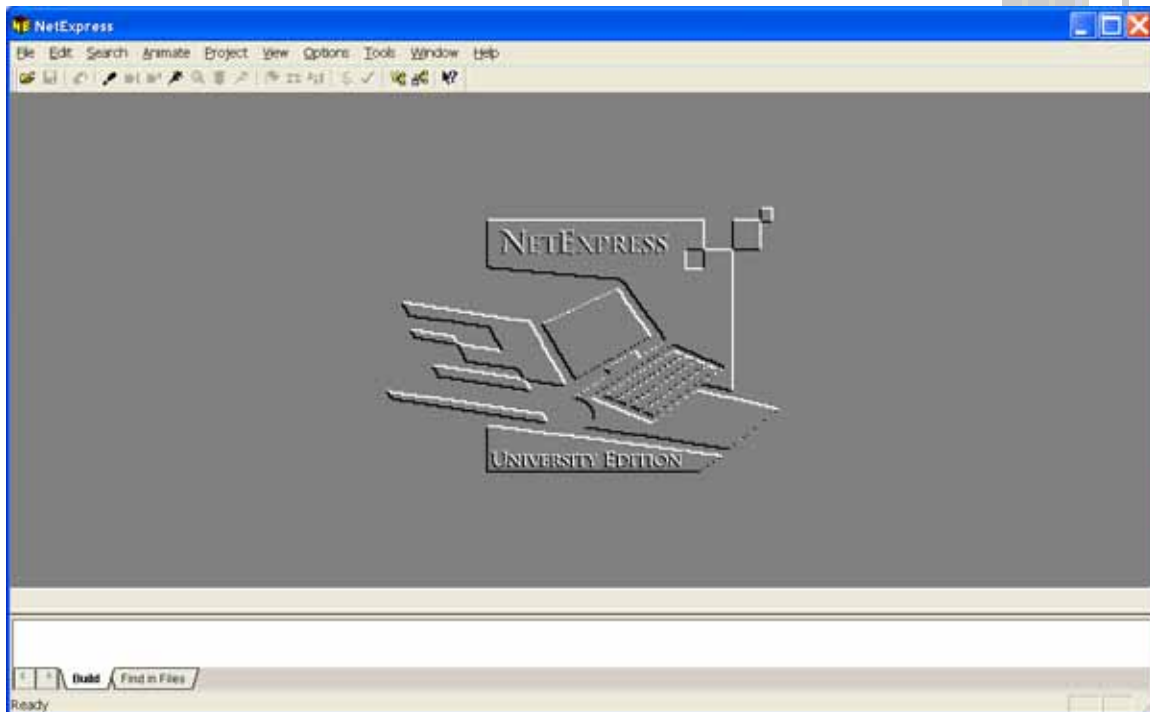
The steps in program development are:

- Start the IDE.
- Load a project.
- Build a project.
- Run COBOL code.
- Animate COBOL code.
- Set IDE options.
- End animation.

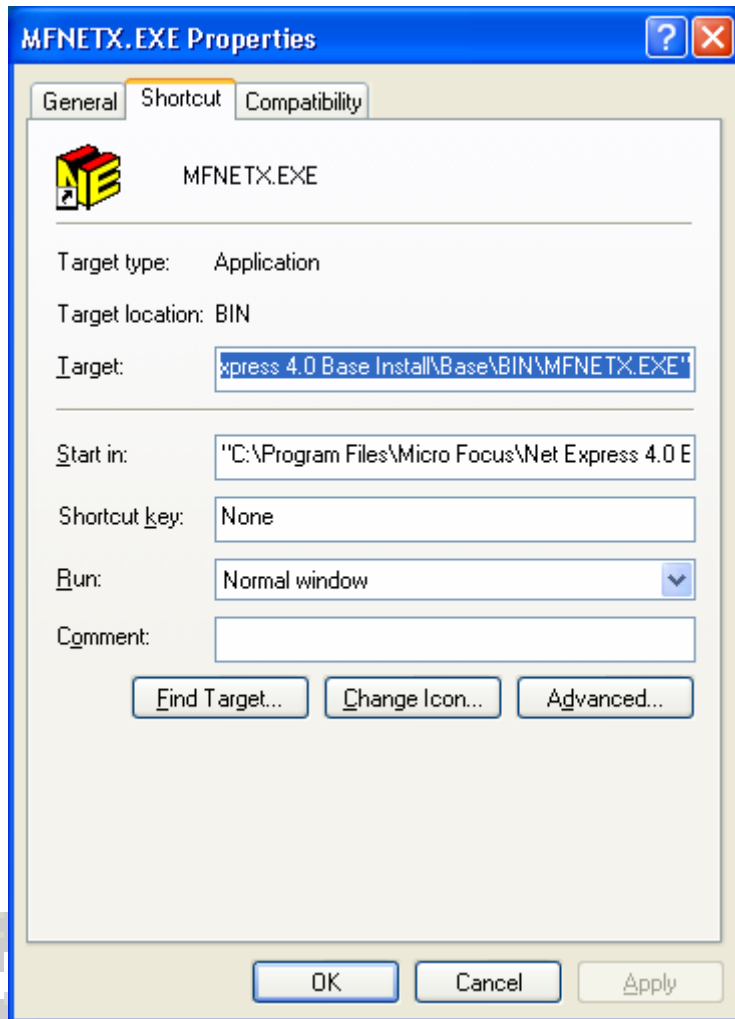
2 Start the IDE

In order to start the IDE:

- Click Programs, then Micro Focus Net Express, then Net Express.



- The upper larger pane is for the project windows and editing windows.
- The pane below it is the Output window.
It has several tabs, including Build and Find.
- Some panes can be detached and positioned elsewhere in the IDE or separately on screen.
- A shortcut on the desktop would be helpful.



3 Loading a Project

In order to load a project:

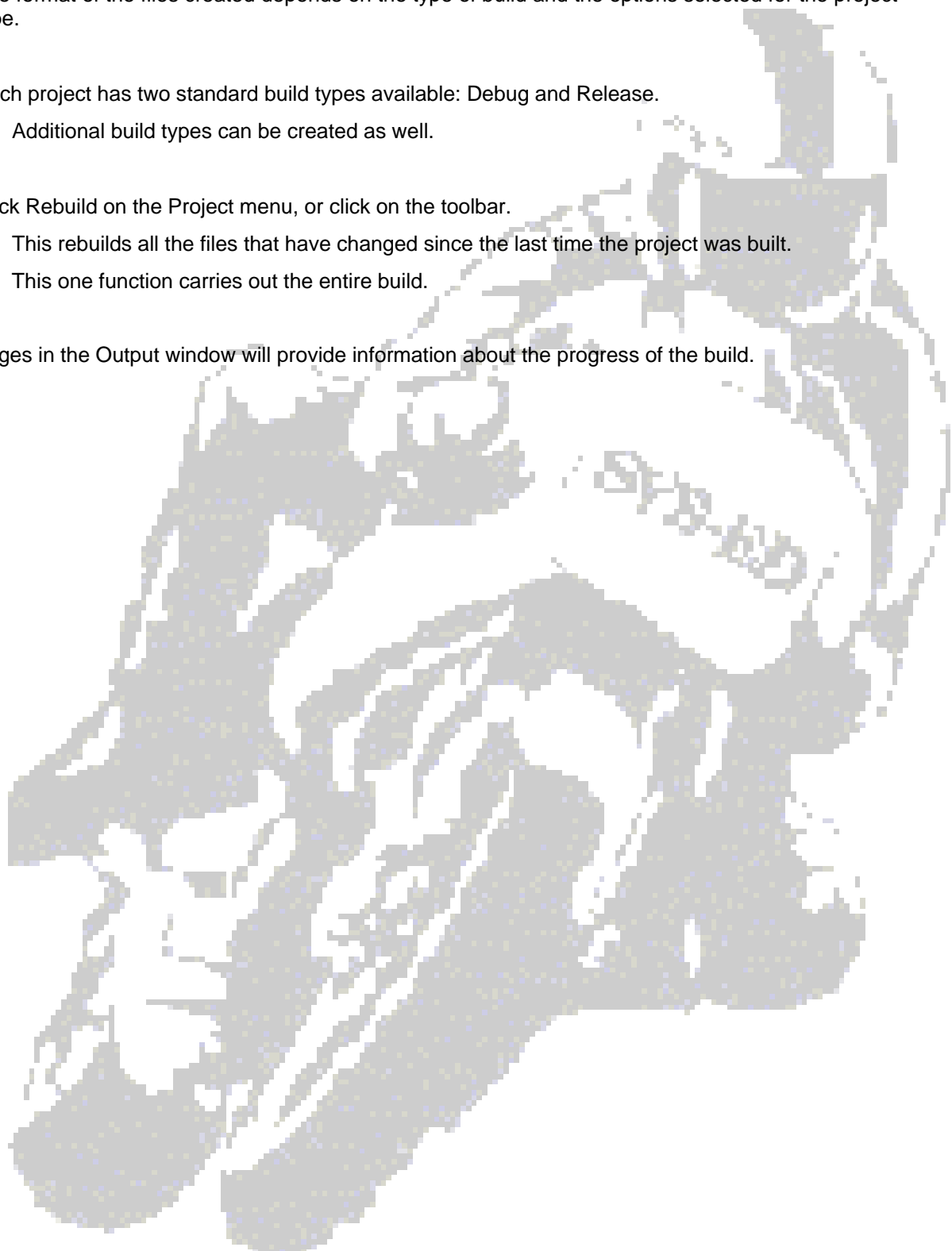
- Click Open on the File menu.
- Go into the appropriate subdirectory and select the project .app. Click Open.
- The IDE opens a project window, displaying the files in the project.
- The left-hand pane is a tree view showing which files are created from which.
- The right-hand pane is a list of the files.
- Right-click in the right-hand pane to get a popup menu.
 - Ensure Show only source files on this menu has no checkmark by it.
 - If it has, click it to make this pane show all files, not just files that can be compiled.
- The .cbl files are the COBOL source files.
- Double-click on any .cbl file.
 - This opens a text window showing the source code.
- The .int files are executable files in intermediate code format; which is a Micro Focus executable format.
- The IDE can also produce industry-standard .exe and .dll files, but .int code has the advantage of not needing linking.
 - This is useful when debugging a new application.

4 Building/Compiling a Project

Building a project means compiling the files to an executable format.

- The format of the files created depends on the type of build and the options selected for the project type.
- Each project has two standard build types available: Debug and Release.
Additional build types can be created as well.
- Click Rebuild on the Project menu, or click on the toolbar.
This rebuilds all the files that have changed since the last time the project was built.
This one function carries out the entire build.

Messages in the Output window will provide information about the progress of the build.

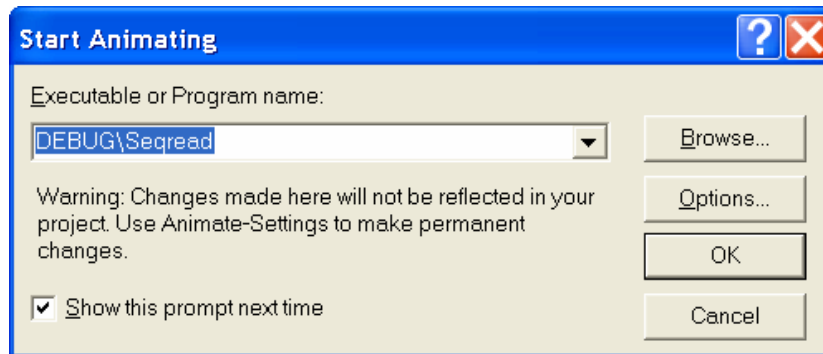


5 Running the Application

The Animate menu is used for both running and debugging.

To run the application without debugging click Run on the Animate menu.

- The Start Animating dialog box appears. It is used to specify where execution starts.



6 Debugging an Application

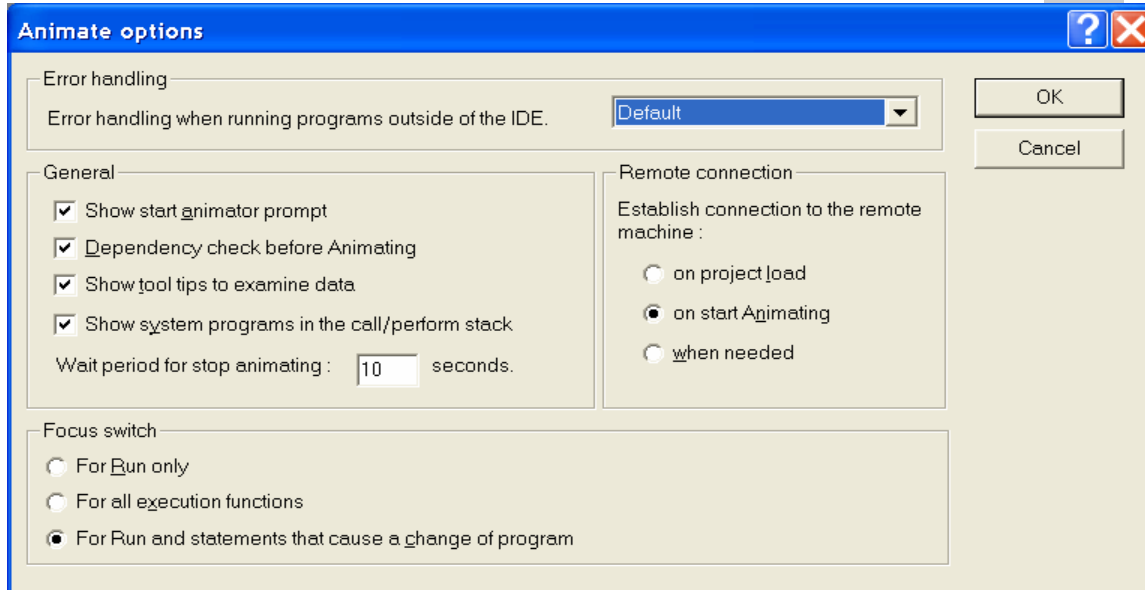
The IDE provides an intuitive and graphical way to trace the execution of code.

- It provides an extensive set of debugging facilities.
- It is useful if the application isn't doing what is expected or if it is necessary to become familiar with an unfamiliar application.
- Click Start Animating on the Animate menu.
The Start Animating dialog box appears.
- The first statement is highlighted, ready for execution.
- Click Step on the Animate menu, or click on the toolbar.
Step executes the next statement.
- Click Run Thru on the Animate menu.
Run Thru executes all the code for a PERFORM or CALL statement in a single step.
- Right-click on a statement and click Run to Cursor on the popup menu.
Run to Cursor allows for execution to a particular statement without setting a breakpoint.
- Double-click on any reference to the data item CHOICE to see its value.
Opens the Examine List, where its value can be seen.

7 IDE Options: Configure

Click Animate on the Options menu.

- On the dialog box, make sure the checkbox by Show tool tips to examine data contains a checkmark and click OK.



- Click Edit on the Options menu.

