

# **Lotus® Improv™**

## **Application Programming Interface (API) Toolkit**

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### **The Lotus Improv API Toolkit**

The Lotus Improv Applications Programming Interface (API) consists of a set of C-language calls that execute commands and retrieve information from Improv. Use these calls to extend the capabilities of Improv by automating procedures and building customized panels.

### **Installing the API Toolkit and Examples**

The single Lotus Improv API Toolkit diskette contains all the files necessary for installation. The installation procedure should take about one minute. To build the API Examples will take a few minutes more.

#### **Before you start**

Make sure you have Lotus Improv 1.0 installed on your hard disk. You must have a NeXT developer's system with NeXTStep 2.0 extended to install and use the Improv API Toolkit.

#### **To install Improv API Toolkit on your NeXT computer hard disk**

1. Power on you NeXT computer and log in using your user name and password.
2. Insert the Improv API Toolkit diskette into the disk drive.
3. Locate the file /Lotus Improv API Toolkit/ImprovAPIToolkit.pkg in the File Viewer. Double-click the icon for the **ImprovAPIToolkit.pkg** file to begin the installation process.

4. The Installer application launches and displays a panel named Improv API Toolkit and Documentation.
5. Click the Install button in the upper-left corner of the panel.
6. A File Viewer panel is displayed in which you can select the directory for the Improv API Toolkit installation. Click your home directory and click OK.
7. A confirmation panel is displayed indicating that the Improv API Toolkit will be installed in your home directory. Click Install. All the files in the Improv API Toolkit package are copied into your home directory automatically.
8. The Installer tells you when the installation is complete. At that time select **Quit** to leave the Installer application.
9. From the File Viewer, open your home directory. Choose **View Update Viewers**.

### Contents of the Lotus API Toolkit

The following directories should be installed on your hard disk in the directory ImprovAPIToolkit:

Doc	online documentation for the API Toolkit, including specification of each function, information on how to run examples, and information about how to build modules. You can install the API Documentation in Digital Librarian for handy reference.
Examples	includes a <b>READ_ME_Examples</b> file with instructions for running API Toolkit examples. Each example is contained in a subdirectory and contains a <b>READ_ME</b> describing the operation of the example.
Library	API include file and library objects
makefile	compiles the Library objects and Example modules and installs them into your local .oakum directory
Source	utility routines for adding new menu items and dynamically loading modules (includes a makefile that compiles the modules and builds <b>OakumInit.o</b> and <b>imxClient.o</b> )

### Building the Improv API Toolkit Examples

The API Toolkit examples show some of the types of applications that can be built. See the **READ\_ME\_Examples** file in the **Examples** directory for instructions on running the examples.

1. Click the directory folder **/ImprovAPIToolkit**. The contents are listed above.

2. Open a terminal shell by double-clicking the icon for the NextApps/Terminal application.
3. Change the directory to the **ImprovAPIToolkit** directory by typing the following command and pressing Return:

```
cd ImprovAPIToolkit
```

4. Build the Improv API Toolkit Examples by typing the following command and pressing Return:

```
make install
```

### **What make install Does** (Optional Reading)

- Builds the MenuServer and Loader objects (**/Source**) and binds them with the Server object to create the **OakumInit.o** file. **OakumInit.o** enables Improv to dynamically load modules created using the API Toolkit. (The file **ClientInit.o** is also created by binding the MenuServer and Loader with the Client object to give the stand-alone GenericApp the same functionality. For more information, see *Building API Modules* in the documentation.) Also copies the **OakumInit.o** and **ClientInit.o** files into the **.oakum** directory.
- Builds all the modules in the **Examples** directory
- Copies all the example module objects from the **/Examples** subdirectories into **.oakum**. Modules are automatically loaded and the Tools menu populated when Improv is launched if their object (**.mod**) files are copied into the **.oakum** directory in the home directory. (The **.oakum** directory appears in the File Viewer only if UNIX Expert has been chosen in the **Preferences**.)
- Issues the command **dwrite Improv enableOakumPort YES**. It is essential to the operability of the API Toolkit.