



Creating a Common Desktop App Installer

SYLLABUS

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Goal

Present a simplified approach to develop a unified desktop installer for Xojo apps under Windows and macOS. You'll build an app template that self-extracts data folders to destination folders the first time it runs. Best of all, you'll get to use a royalty-free class (`c1sUDI`) that performs the data loading for your app.

Overview

<i>Title</i>	Creating a Common Desktop App Installer
<i>Class code</i>	KN-UDI
<i>Length of tutorial</i>	Video: 24 min, time to take course: 2-3 hours
<i>Download package</i>	Sample code and technical documentation
<i>Audience</i>	Beginning to intermediate Xojo developers
<i>Tested with Xojo</i>	Xojo 2019R3.1 64-bit (Windows Pro and macOS Catalina)

Learning Objectives

You want to focus on building and supporting app development. Spending any significant time on app installers seems like a complicated waste of time. In this tutorial you'll learn:

- Why a unified app installation is important to both the app developer and the user.
- Design a folder layout for the app executable, app libraries, read-only resources, and data files.
- Automate the collection of files (resources, preference settings, data) during a build with Xojo's build automation.
- Writing the code that determines if data files need to be copied to the user's system.
- Packaging up the app for distribution.

Problem Statement

For some time, I've been searching for the easiest way to create installers with my Xojo app development. My app, like many desktop apps, uses all sorts of files organized as resources, data bases, preference settings, and other uses. There's a challenge to reliably collect and assemble all of these files to be installed and another challenge to provide the logic for copying them to the right folders on the user's system.

Maybe for experienced Xojo programmers, this is no big deal ("just ZIP 'em all up and copy them when your app starts up"). Famous last words. The actual mechanics can be daunting. The good thing is that Xojo provides the foundation to help create app packages that incorporates your app, supporting code libraries, and data.

Topics Covered in the Training

1. Who Needs an Installer Anyway?
2. My History of Installer Mishaps
3. Goals of a Common Installer
4. Setting Up the Development Environment
5. The Approach Taken
6. Using Build Automation with App Data
7. Where the App & Data Resides
8. The KN-UDI Class (`clsUDI`)
9. How to Load Your App's Data
10. Building the App Installer
11. How to Get the Project
12. Quiz

Course Contents

Presentation (online):

- Video training course

Handouts (download):

- KN-UDI sample Xojo project code and clsUDI class for your use
- Documentation (newspaper format)
- Course syllabus (this document)
- Workshop slides for notetaking

Biography



Ken Whitaker, managing director of Leading Software Maniacs (LSM), has written books on leadership and is an innovator in [instructional design](#) and agile project leadership [workshops](#). Ken is the creator of [PM Chalkboard](#) and most recently the editor for [Better Software](#) magazine. He is creating a suite of [Spresso](#) productivity apps for creative professionals and the unique [The Nerd Herd Game](#) gamification product that redefines learning. This app-based game will be an accessory to a visual book/course called [Young Person's Guide to Software Project Management](#) currently in development. Contact him at leadingswmaniacs.com.