



Loading “Zipped” Files into an IPm

Abstract:

Winzip (or an equivalent) archiving utility can be used to bundle groups of files that are intended to be loaded into an IPm controller. This capability is a convenience for system designers that wish to include collections of files as part of a project configuration or OEMs that wish to bundle firmware installations as part of their IPm-based product. Only knowledge of Windows `.zip` archiving is needed to create or use this feature.

Please note that the use of `.zip` archives is a convenient alternative to creating `.tar` files. However, the use of `.tar` files provides additional capabilities, including the ability to install (not merely copy) files into an IPm controller and also to include Slackware-style scripts within the bundle. Refer to the IPm Tech Notes [“Tar Overview”](#) and [“Building Slackware-style Packages \(.tar files with scripts\)”](#) for further information.

Zip Archive Files as Part of a Project Configuration

As part of an IPm station configuration, the I/O Tool Kit software presents a dialog window that permits a list of files to be defined that are to be copied into the station as part of a configuration load. It is permissible to include a `.zip` file on this list. When a project load occurs, the files on this list are loaded in the order they are included on this list. When a `.zip` file is encountered, it is unarchived, and the contents are loaded into the station in the order they are found within the archive file. The contents of the `.zip` archive files may include individual files, `.tar` files, and any other files that could otherwise be loaded individually into an IPm controller. If all of the files are to be loaded into the same directory in the IPm, no path information is needed in the archive file. The I/O Tool Kit provides a place to specify the “Path in the Station (destination)” for all files on the “Files to Load” list. If the files within the archive are to be loaded into different directories in the IPm, then path information is required. Refer to the suggestions below for creating path information.

Note: The unpacking of `.zip` files is not recursive. You cannot include `.zip` files within other `.zip` files.

Zip Archive Files for Firmware Loading

As an alternative to loading standard SIXNET supplied firmware files, a user-defined `.tar` or `.zip` file can be loaded into an IPm controller. The use of a zip archives permits a system designer to bundle standard SIXNET firmware, third party firmware packages and custom applications programs into a single file that can be automatically loaded by the I/O Tool Kit software. Files or packages will be installed in the order they are included in the archive, with the exception that SIXNET firmware files (which MUST be present) will be installed first. Please refer to the I/O Tool Kit help topic [“Creating a Customized IPm Firmware Package”](#) for further information.

Creating a Zip File for an IPm Controller

Zip archives are created using “WinZip” or any equivalent archiving utility. Files are collected and archived in the usual manner. If path information is required (usually because the files within the archive are to be loaded into more than one directory), then it is suggested that the files be arranged in your source computer (the computer you are using to build the archive) in the identical tree that they will be stored in the IPm controller. Simply create directories in your source Windows environment and copy the files to be included into the archive into the appropriate directories. Then create the archive with the option to include path information. Only the path relative to the starting point or “root” need be included. The I/O Tool Kit will automatically convert the Windows “\” path to the “/” used by IPm Linux-based directory tree.