Montage User Manual 1.0.0

Montage Overview

This User Manual provides the details for how to use Montage as a user, or consumer of packages and products. For details on creating packages and products and listing them on the Montage marketplace exchange, visit the Montage Merchant Manual document found here.

Montage allows teams and communities to effortlessly build digital ecosystems that scale. We think of an ecosystem as a set of related software packages, applications and products that are used together. These ecosystems can be organized based on programming languages, tools, market verticals, or any other organizing concepts that makes relevant packages, applications, and products easier to find and use. Montage provides infrastructure to support generic ecosystem requirements, including packages, products, licenses, installers, and more. Montage can be extended to support any existing or new ecosystem.

You can read this Overview section to get a clearer understanding for what Montage is, or you can skip ahead to the "Getting Started" section.

Introduction to Montage

Montage, Packages, and Activities

Montage is a digital infrastructure platform designed to support **composable digital ecosystems** at scale. It provides a generic model of **packages**—modular units that can depend on other packages across diverse technologies like **NuGet**, **Maven**, **pip**, and more.

Montage doesn't replace existing package systems. Instead, it enhances them with a unified model and a focus on power and ease of use.

At the core of Montage is the concept of abstract packages. From this foundation, Montage introduces a specialized concept called an activity.

An activity represents something you want set up and configured on your system—such as a workflow, a software project, or any logical unit composed of multiple configurable parts.

For example, a software development activity might include:

The source project to be built All its internal and external dependencies Build tools, IDEs, and scripts required for setup

This activity acts as a top-level representation of everything needed to orchestrate and run that system—without requiring manual intervention.

Activities can be created and used **locally**, or bundled into **activity packages** for sharing and deployment. When a user installs or "attaches" an activity package, they get a fully configured environment guaranteed to work as intended.

Ecosystems

In Montage, an ecosystem is a flexible abstraction for any digital community or platform.

Montage provides built-in support for the core needs of scalable ecosystems, including:

Automated orchestration of packages and their relationships Organization and discoverability of reusable components Integrated documentation A two-sided digital marketplace connecting contributors and consumers

The ultimate goal of Montage is to offer **reusable infrastructure** that powers **any digital ecosystem**—enabling faster growth, better collaboration, and easier reuse across domains.

Introduction to the Montage Launcher

Montage Launcher

The Montage Launcher is a desktop application that provides a clean interface for managing activities.

It also supports digital ecosystems, like Virtuoso, by functioning as a local server for ecosystem applications to handle orchestration and other complexities.

When ecosystems issue requests to the Montage Launcher, the Montage Launcher displays a popup in the lower right hand corner of the screen, above the task tray, to alert the user that the Montage Launcher is being used.

The Montage Launcher desktop application's view is organized with 9 tabs along the left, as shown below. These tabs are detailed in the sections that follow.

Ecosystems Feed Downloads Feed Installations Feed Activities Local Activities Products Licenses Domain Issues Local Server



Ecosystem Selection and Context in the Launcher

The currently selected tab is highlighted by a thin blue line on the left.

Within the "Ecosystems" tab, available ecosystems are displayed horizontally across the top.

The selected ecosystem is:

Highlighted with a multicolored border in the list view.

Shown in the bottom-left corner of the Launcher window.

The selected ecosystem determines the context for manual actions such as:

Browsing

Downloading

Installing content



QuickStart Packages

QuickStart packages are specially designated packages that help new users get started quickly with an ecosystem. Ecosystem creators can define these as entry points—typically representing common workflows or essential tools.

Like all Montage packages, QuickStart packages can serve as placeholders that reference one or more other packages to represent a complete workflow.

QuickStart Packages in the Virtuoso Ecosystem

The Virtuoso ecosystem defines several QuickStart packages:

VirtuosoLauncher The core framework for building no-code applications in Virtuoso. Most other packages depend on this. Virtuoso.WPFCSharpToolkit.VS2022 A workflow package that depends on VirtuosoLauncher. It adds support for creating no-code C# WPF desktop applications in Visual Studio 2022. Virtuoso.EmbeddedToolkit.VS2022 A workflow package for virtualizing embedded systems. Depends on: Virtuoso.WPFCSharpToolkit.VS2022 Which depends on VirtuosoLauncher

This layered dependency ensures that all necessary components are installed to simulate embedded systems in a no-code environment.

Virtuoso.Wizard.Port

A standalone desktop application for creating no-code port definitions.

Virtuoso.Wizard.Component

A standalone desktop application for creating no-code component definitions



Key Takeaways

Software continues to transform every aspect of business and daily life, and new software solutions to wide-ranging problems continue to proliferate. These solutions, however, are commonly just one smaller part of a larger problem. Companies do not need to become natural language processing experts and roll their own chat box, for example. Companies need to quickly find the best chat box solution and effortlessly incorporate it into their business CRM strategy. Alternatively, using Montage a company can leverage a third-party chat box and bundle it into a new software and product composition. Software composability will fundamentally drive the future of software architectures, as ease of integration becomes paramount, and as the need for specialization, expertise, and ease of integration increases.

Tomorrow's killer apps and business system juggernauts will need to pull from a rich montage of composable software solutions with breakneck speed to market. Montage provides the infrastructure needed to support this software component digital economy of the future.