

Whitepaper: Enabling data forms with the Travelport Universal Desktop™ SDK

Introduction

Custom data forms can be an important part of a travel agent's workflow. Custom data forms can be used to enter file finishing remarks, confirm data from external systems, or otherwise enter data using a form rather than using cryptic entries.

Customising legacy applications requires many different programs and technologies. Because these customizations were created outside Travelport's application offerings, any updates to the original application often broke add-on customizations, which had to be redesigned and redeveloped to work with the latest version of the application.

The key benefit of Travelport Universal Desktop and Travelport Universal Desktop SDK is that they were built in tandem and both are built on the Travelport Universal API. With such tight development integration, Travelport Universal Desktop SDK components fit seamlessly into the Travelport Universal Desktop during component deployment and through Travelport Universal Desktop updates.

Data entry using Galileo Desktop™

In order to create a custom form for data entry in Galileo Desktop, a developer was required to go through the following steps:

1. Create separate application with the necessary user interface for data entry.
2. Ensure that the separate application connects to Galileo Desktop using [COM](#) – a technology for communication between processes. The SDK for Galileo Desktop would then allow the application to send cryptic commands.
3. Implement Galileo XML API Desktop™ in order to use XML transactions rather than screen scraping.
4. Embed the application into the Galileo Desktop window (where it would normally appear floating on top of the terminal windows) by writing custom code using Microsoft® Windows system calls. If this is not done, the application appears completely separate to Galileo Desktop.

5. Ensure that the application is launched at appropriate times, using either a button on the toolbar to allow the user to manually launch the application or writing a JavaScript™ in GDAudit to allow the application to be launched whenever the user types a specific command.
6. Ensure that the application responds and reacts to all data entry. Potentially, the application could hook into Viewpoint as well.
7. Build and test the application.
8. Create a custom installer to be run on all users' machines.
9. Ensure that all users receive the installation package.

Data entry using Travelport Universal Desktop

The Travelport Universal Desktop SDK installation includes Microsoft Visual Studio™ templates and sample projects.

1. From Microsoft Visual Studio, create a new activity from the Activity template. Templates are installed as part of the SDK and are used to quickly set up all necessary files in the project.
2. Using the form supplied by the template, add the fields that are needed. Link the fields with the underlying view model. This is the recommended way to create Microsoft WPF applications, and the template ensures you have both the view and the view model created automatically.
3. The project is already hooked up to various classes provided by Travelport Universal Desktop that enable you to communicate with the current Universal Record and other parts of Travelport Universal Desktop. This allows you to quickly read and add necessary information.
4. Build and test your project using the Test Harness, which is a full-featured version of the standard Travelport Universal Desktop application that runs against the pre-production environment.
5. Deploy your project using the Administration Portal website for Universal Desktop.

Easy installation and distribution

Travelport Universal Desktop SDK components do not require any manual installation on users' machines. Instead, using the Administration Portal, you choose which users have access to the activity. The next time an assigned user logs into Travelport Universal Desktop, the activity is automatically downloaded and is instantly ready for use.

Easy use

You can add the custom activity as a mandatory or optional step in a workflow. It is possible to set up workflow components, such as completion criteria, based on how the fields are completed in the custom activity.

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