

Integration Guide

Connecting a Trading Platform to Speed4Trade CONNECT

Version 1.1



Changelog

Date	Chapter / Change	Author	Version
04.12.2017	Initial version	Sebastian Seidl	1.0
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List of Illustrations



Reading the Integration Guide

Point of View

Prohibited

All operations and processes are usually described from the perspective of Speed4Trade CONNECT.

An <u>order import</u> means the import of an order into Speed4Trade CONNECT. That order is provided by the trading platform (export from their point of view).

Annotations, Symbols, and their Meaning

	Best Practice	Do this!
	Information	Gives you additional knowledge.
<u>^!</u>	Warning	Please pay attention to details.

Don't do this, please!



1 Introduction

1.1 Why is there an Integration Guide

An integration guide considers the <u>process</u> of developing a trading platform integration. It relates to all available technical resources and shows when and how to use them. The result is a plug-and-play trading platform integration in form of a template and its associated technical documentation and onboarding manual. All technical resources can be found in the partner portal.

https://partner.speed4trade.com/developer/start-your-integration/

The purpose of this document is to support developers in:

- Understanding the relationship of all technical components.
- Knowing about existing supporting resources.
- Creating a Proof of Concept.
- Developing the trading platform integration step by step.
- Considering processes like documentation, onboarding, maintenance, and support.
- Knowing about certification advantages.

1.2 Approach to Integration

Here is an overview of all the processes required to successfully implement a trading platform integration:

- 1. Be clear about the goals and objectives of your project.

 Result: Integration can be a customer project or product for reselling please be aware:
 - There is a difference between the two!
- 2. Get and analyze the API documentation of the trading channel you'd like to integrate.
- 3. Read this guide and acquire a knowledge of the Speed4Trade Integration Framework.
- 4. Do a Proof of Concept! Create a concept based on the Speed4Trade documentation sample.
- 5. Get access to a Speed4Trade CONNECT Test Server.
- 6. Setup test server with sample offer export (Chapter 0).
- 7. Develop the Template.
- 8. Write the technical Template documentation and onboarding manual.
- 9. Install the Template on the test server.
- 10. Test the Template.
- 11. Release the Template.
- 12. Test/pilot the onboarding process.
- 13. Rollout to a pilot customer.
- 14.

There are additional and optional process steps available (e.g. "officially release"). Partners might be interested in our cooperative sales, marketing and operations support. That requires a certification of your Template and a participation in the Speed4Trade partnership program.



2 The Big Picture

The API 2.0 offers the possibility to easily connect different trading platforms to Speed4Trade CONNECT (*Image 1*). A trading platform can be anything were a buyer can accept an offer and create an order, e.g. a marketplace or online-shop. The configuration of a new trading platform will be done with the Multi-Channel-Plugin. For example a subchannel, an account, the marketplace categories and the offer attributes have to be configured.

Then a new job can be created in Speed4Trade CONNECT and its job options can be defined. You could roughly say that a job equals a process, e.g. an offer upload or an order import. A job uses a property file, which is one component of the Template. The property file uses the Speed4Trade CONNECT API 2.0 DSL (which you need to get familiar with). It contains the logic and steps of a process. The property file can transform data into a desired target format using extractor files and script files. The sum of the files that belong to all process of a trading channel is called a Template.



Decision required!

The transformation logic to create a 1:1 interface fit between two systems can be developed on either systems side. Speed4Trade does provide a default template, which is ready to use, if you would like to serve the Speed4Trade CONNECT API 2.0 processes & definitions. For further details see also chapter 5 "Setup a Development and Test Environment".

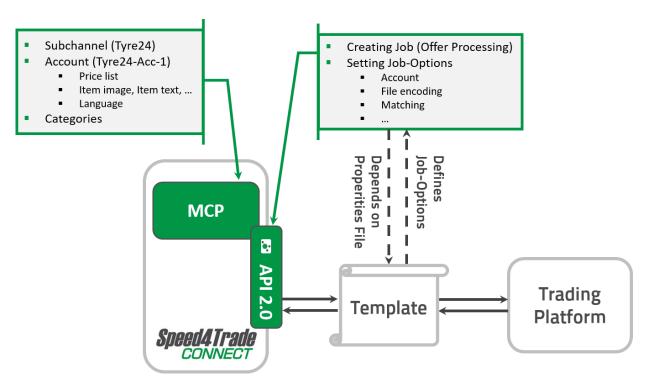


Image 1: Interaction of elements - Multi-Channel-Plugin, API 2.0, Templates, Jobs & Job options



3 Resources

3.1 Partner Portal

The below listed additional resources can be found in the partner portal. The partner portal can be reached via the URL <u>partner.speed4trade.com</u>. You can find changes in the respective changelog of a resource.

- Technical API 2.0 documentation
- Speed4Trade-CONNECT-Online-Manual (German only so far!)
- Proof of Concept document sample
- Setup Guide: Setting up a Test Environment
- Concept and Documentation samples (in planning)

3.2 Test Server

Speed4Trade will provide its partners and customers with a Speed4Trade CONNECT test environment. You can find more information and request the test environment in the <u>partner portal</u>.

If you already have access to an online or offline test system, we can activate the test license for the Multi-Channel-Plugin upon request.



We do provide a setup guide in the partner portal for setting up the test environment.



The test environment cannot be used to connect an ERP or merchant System via the Webservice API. Please contact partner@speed4trade.com for further information.

3.3 Support by an Integration Consultant

If you have any questions before or during your development, you can contact the Integration Consultant of Speed4Trade. Contact integration@speed4trade.com for questions about the Multi-Channel-Plugin and the API 2.0.



The support by an Integration Consultant is subject to a business agreement. Please contact partner@speed4trade.com if you are not sure about the existence of such an agreement.

4 Proof of Concept (PoC)

Speed4Trade highly recommends to create a PoC. The goals of such a PoC are:

- Clarity about the complexity and limits of the integration and choice of integration model (e.g. implementation logic on which side?)
- Knowing the effort and estimation of such an integration.



- The reduction of risks.
- Ensure customer acceptance of a Multi-Channel-Plugin integration and the level trading process automation.

If it can't be developed within 10 days, it is likely that the result of the PoC shows the likeliness that an integration using the integration framework of API 2.0 and the Multi-Channel-Plugin cannot meet the traders' expectations adequately.

The result of the PoC is the fact whether an integration makes sense and what complexity is to be expected. During the PoC, it is quite common for questions to arise regarding the trading platform. All questions should be collected and reconciled with the trading platform. Add a FAQ section and their answers to the PoC document.



Use our documentation sample! It simplifies your PoC!



If you are already familiar with the trading platform, possibly because you are employed there, some information mentioned below may be obsolete so you may skip chapter 4.1.

4.1 Familiarize yourself with the Trading Platform

A requirement for a PoC is to get to know the trading platform. Without knowing the basics, it can be difficult to start the integration. You will need:

- Trading platform business information (Example questions about trading platforms can be found in the documentation sample)
- The API documentation of the trading platform (this includes the documentation <u>AND</u> sample test files)
- A test account or access to a seller login for testing



Depending on the trading platform and its complexity, the amount of information can increase significantly.

4.2 Familiarize yourself with the Speed4Trade CONNECT API 2.0

If you don't know anything about Speed4Trade CONNECT yet, you start to get an overview of our middleware. Therefore, use the <u>online manual</u>. Afterwards, you can familiarize yourself with the API 2.0. Find your way around the <u>technical documentation</u>. Read the general information and process information. Then get an overview of the field lists, value tables and the sample files.

4.3 Complete the **PoC**

- 1. Enter the relevant information on the front page (Fields are highlighted with a < > tag)
- 2. Fill in the Fact Sheet with general trading platform information
- 3. Identify and note all calls or processes the trading platform provides



- 4. Note whether they are mandatory or optional¹
- 5. Note all fields of the mandatory processes and the processes you want to implement
- 6. Find and note their counterpart in the field list of the technical API 2.0 documentation
- 7. Note and compare the fields of the value tables
- 8. Clarify your pending questions

There are basically two results of a PoC: The feasibility and the effort of the implementation. Is the estimated effort more than 10 days, you should check the suitability of the integration using the API 2.0.



In some cases it is still possible to realize the integration, although fields do not have their exact counterpart on the API 2.0 side.

1. ORDER process

additional_order_data values can be passed to the element during order import. This element can contain several elements of order_data, to which the fields key and value are assigned. Please note that these values are stored and not processed in Speed4Trade CONNECT. This method is therefore suitable for displaying additional data in Speed4Trade CONNECT or passing it to an external (ERP) system.

2. **OFFER process**

If the trading platform expects additional item information for an offer export that cannot be covered by the available fields, it is possible to create attributes (see chapter **Fehler! Verweisquelle konnte nicht gefunden werden.**). These can be assigned to fields of the trading platform API during the transformation of the template.

3. Further processes

Even if it is not possible to represent all processes with the API 2.0, a certain degree of automation might suffice. The trading platform may provide a backend in which certain functions can also be maintained manually. For example, offers can be exported and orders imported, but cancellation annotations must be managed manually. Whether an MVP (=Minimum Viable Product) approach can be used for this connection and whether the requirements can be met has to be finally decided on a case-by-case basis.

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¹ our experience shows, that this is not always the easiest task



5 Setting up a development and test environment

Just request a test environment und follow the <u>Setup Guide: Setting-up a Test Environment</u> step by step.

- Setup a test item (article/product) in Speed4Trade CONNECT
- Setup a trading platform in the Multi-Channel-Plugin (Simple Sample)
- Setup a job (e.g. an offer export) using the default offer export sample
- Run the job and evaluate the result
- Continue with next process
- done



The result will be a ready to use interface based on the Speed4Trade CONNECT data structure. If the transformation will be done on the trading channel side, you are already done with the template development! If the transformation shall be developed on the Speed4Trade CONNECT side, continue with the relevant chapters like "7 Development of Templates".

6 Typical Processes –An Overview

For a simple interface, 3-4 processes are sufficient. These are:

Setup

Import trading platform (TP) categories -> Planned

Offers

Export offer (Items) to TP -> Offer_Export

Orders

Import orders from TP -> Order_Import

Export order status (e.g. shipped) to TP -> Order_Export

7 Development of Templates (coming soon)

Stay tuned

8 Installation of Templates

Please see the <u>Setup Guide</u>: <u>Setting-up a Test Environment</u> to find out how to install a Template.

9 Certification (coming soon)

Stay tuned



10 Support (coming soon)

Stay tuned

11 Updates (coming soon)

Stay tuned

12 FAQ (coming soon)

Stay tuned



13 Appendix

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I. Glossary

Multi-Channel-Plugin

The Multi-Channel-Plugin is integrated into the Speed4Trade CONNECT frontend. This allows you to configure and maintain trading platforms. This includes, for example, price lists, item media, item texts and item images.

API 2.0

The Speed4Trade CONNECT API 2.0 is the technical component for connecting trading platforms. In summary, API 2.0 consists of a trading platform-specific Template, Jobs and their Job-Options.

Template

The Template is the "tool" of API 2.0. It represents a trading platform and consists of several files. These manage a particular process as well as the sequential processing of the contained logic. Due to several factors, such as the degree of automation or complexity of the logic, the number of files in the template can vary. Basically, the files can be defined as follows.

Properties File

The properties file is the core file programmed in the Speed4Trade API 2.0 DSL. It is selected in the job and therefore represents exactly one job (process), such as an order import. This is processed sequentially after the job is called. Script files, extractor files and mapping files can also be called up in the properties file.

The specific structure and function of the properties file is described in more detail in the technical API 2.0 documentation.

Script File

A script file is an XSL file. It includes logic to transform data from a source format to a specific target format

For example, orders are fetched from a trading platform. These are delivered as a file in JSON format. The responsible properties file calls a script file that transforms the file into an XML format.

Extractor File

An extractor file is also an XSL file. It is used to extract certain parts of an XML file for further processing.

For example, when an order is imported, the order items or order header are extracted.

Mapping File

Certain mappings can be defined in mapping files. For example, different language versions of country names and the currency can be mapped to the ISO country code.

The way in which this type of mapping is affected is very static. The mapping should therefore be mapped in the properties file itself using the @GUI method. In this way, the user can define mappings via the job options and change them as required.



Job and Job-Options

Jobs can be created in the admin backend of Speed4Trade CONNECT as well as in the frontend. In the job configuration, a properties file of a Template is assigned to the process, which is then processed sequentially during execution.

The Job-Options represent the central settings of the job. Depending on the type of Job and the configured properties file, different parameters can be configured and values can be mapped. The Job-Options are defined in the Template's properties files.



II. The Speed4Trade CONNECT environment

