

Agency Private Fares XML Interface

**Technical Product Overview
(External)**

Final v2.0 22 September 2009

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Introduction

The *Agency Private Fares XML Interface Technical Product Overview* provides a summary of the Agency Private Fares (APF) XML Interface and the methods that are used to update the APF database.

Overview

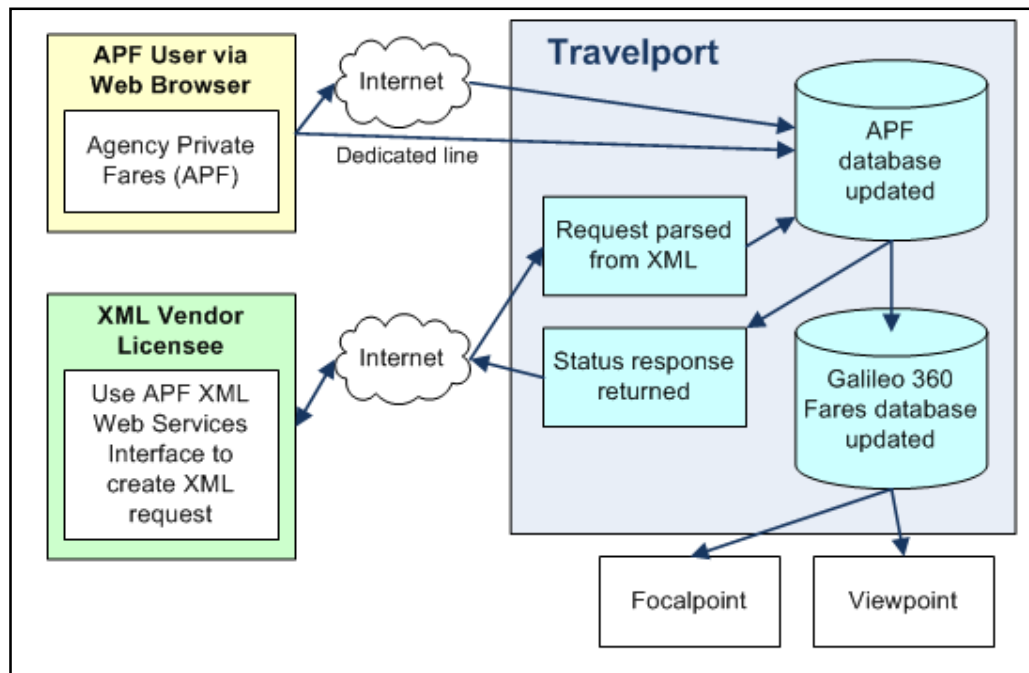
The Travelport Agency Private Fares (APF) product is a web based facility providing travel agencies and consolidators with the means to maintain their negotiated fare contract data and have those fares integrated with public fares for fare display and fare quote. Some large agencies, multi-national agencies and consolidators use an external source to maintain their negotiated fares data. Data from third-party databases is not received by the Galileo 360 Fares database, and is, therefore, not integrated into a single fare display.

The APF XML Web Service Interface bridges the gap for travel organizations using the APF database as well as third-party databases. The APF XML Web Service Interface provides a method for XML Vendor Licensees (i.e., users of the APF XML Web Service Interface) to update the APF database and, in turn, the Galileo 360 Fares database so that customers have access to a fully integrated fares display.

Functional Overview

The following diagram illustrates how the Agency Private Fares product and the Agency Private Fares XML Web Service Interface work together to populate the Galileo 360 Fares database.

Fares from both Agency Private Fares users and XML Vendor Licensees are fully integrated in the Agency Private Fares database and the Galileo 360 Fares database so that fully integrated fares are displayed via Focalpoint® and Viewpoint™.



Benefits of APF XML Interface

For customers that compare GDS (i.e., Apollo or Galileo) and local fares databases, the APF XML Interface:

- Provides an integrated fares display of all public and private fares.
- Ensures total validation of fares and reduces agents' ADMs, bookings class errors, etc.
- Reduces the need for agents to visually compare/order fares when checking GDS and non-GDS displays.

For customers that load fares into both APF and third-party systems, the APF XML Interface:

- Reduces errors in duplication of the manual fares loading process.
- Reduces agency manpower time (loading fares twice).
- Allows simultaneous updates.

APF XML Interface Functionality

The APF XML Interface is a real-time service that allows SOAP-based requests to access the functionality behind the APF product and update the APF database.

How the APF XML Interface Works

The APF XML Interface allows XML Vendor Licensees to:

- Create contracts, addons, zones, and global distribution groups.
- Discontinue contracts and addons.
- Delete global distribution groups and zones.
- Send multiple contracts, addons, zones, or distribution groups in a single XML request.
- Send partial updates for contracts, zones, addons, global distribution groups, interior and/or gateway zones without having to send a complete replacement.

Upload requests are immediately applied to the Agency Private Fares database and are included in the next scheduled extract from APF to the Galileo 360 Fares database.

Set Up Requirements

Each XML Vendor Licensee requires a company name and company ID (source ID) which is provisioned as part of the initial set-up process.

Before using the APF XML Interface, the following supplier and user details must be set up in the APF product:

- An APF supplier must have the *Authorized for XML Interface* checkbox enabled so that a user in that supplier code can upload fare contract data using an XML interface.
- A user within the above APF supplier must be created with *Agency – XML Interface* permissions. This user name and password is sent in XML requests to the APF server for validation.

The Source ID, APF Supplier Code, User ID, and Password must be sent with each XML message and will be validated against data contained in the APF database.

Technical Information

The Agency Private Fares XML Interface consists of several XML schemas.

An XML-schema is a document that describes the valid format of an XML data-set. This definition includes which elements are (and are not) allowed at any point. The Agency Private Fares XML Interface employs SOAP document literal to encapsulate the requests and responses.

XML Requests

The following XML requests are available:

- APF_ContractRQ is used to create, update, and discontinue contracts.
- APF_DistributionRQ is used to create, update, and delete global distribution groups.
- APF_ZoneRQ is used to create, update, and delete zones.
- APF_AddonRQ is used to create, update and discontinue addons.

The requests listed above may also include the following schema:

APF_ContractCommonTypes.xsd
APF_DistributionTypes.xsd
APF_GeographicTypes.xsd
APF_OTATypes.xsd
APF_RequestResponseType.xsd
OTA_CommonTypes.xsd
OTA_SimpleTypes.xsd
OTA_SimpleTypes.xsd

Notes:

- The attributes of the request messages are defined by the Open Travel Alliance (OTA) and not all elements are applicable to Agency Private Fare transactions.
- XML Messages are based on SOAP 1.2.
- Upload requests are immediately applied to the APF database and are included in the next scheduled extract from APF to the Galileo 360 Fares database.

XML Responses

Responses from Agency Private Fares (both error and success indicators) use the message-set ending in "RS".

- APF_ContractRS
- APF_DistributionRS
- APF_ZoneRS
- APF_AddonRS

Each response contains a reference name (e.g., the contract ID, distribution name, zone name, or addon ID) as well as a Success message or Error section.

Notes:

- All requests are session-less; the system does not return session or state information.
- All requests are encrypted using SSL (https protocol) using the standard destination port number 443.
- For specific information about an error code returned in a response the XML Vendor Licensee should refer to the online help available via the AIS website.

Request Sequence

Some information must exist in the Agency Private Fares database before a contract can be built using that information. The sequence of requests is as follows:

1. Requests to create zones and global distribution groups must be sent before those new zones and global distribution groups can be included in a contract request.
2. Requests to create zones can be sent at any time because zone processing does not rely on contract or global distribution group data or processing.
3. A contract that uses zones or global distribution groups that currently exist in the Agency Private Fares database can be sent at any time.
4. A contract that creates a contract-specific distribution group or groups can be sent at any time.

Contracts

Private fare data is entered into Agency Private Fares on a contract-by-contract basis. Each contract can have an indefinite number of private fares associated with it.

There are two types of contracts:

1. Calculated Contracts, which use fares that are calculated against an existing airline filed, public or private set of base fares. Rules are either those that the airline files, or they can be overridden in specific instances.
2. Standard Contracts, where all the contract fare and rule details are manually submitted with the contract.

Uploading Contracts Using APF XML Interface

The Agency Private Fares XML Interface's APF_ContractRQ is used to create, update, or discontinue contracts on the Agency Private Fares database. Multiple contracts can be submitted in a single request (e.g., you can send two new contracts and an update to an existing contract in a single request). Agency Private Fares returns the APF_ContractRS response with a success or an error message, depending on whether the contract was successfully processed.

The Agency Private Fares product has sixteen different contract windows, including Flight Rules, Advance Reservations and Ticketing, and Combinations. These contract window options are mirrored exactly in the APF_ContractRQ schema, allowing XML Vendor Licensees and agencies the same contract flexibility that the APF product offers.

For a contract to be valid and to quote accurately, the minimum data entry requirement for both the APF_ContractRQ request and the APF product is:

- Basic high-level contract details, such as Contract ID, Airline Code, Contract Type, and North American (Yes/No), followed by:
- Fares/Routes
- Distribution

All other contract elements are optional, but it is recommended that Combinations are sent with the request to ensure the correct journey types are selected for proper quoting of the contract.

The Minimum information that needs to be sent for partial updates is:

- The Supplier Code
- Carrier
- Contract ID
- Any other change information

Discontinue a Contract

An active contract cannot be deleted. However, it can be discontinued if the Discontinued Date is set to today's date and the contract is uploaded again. When the contract is uploaded to the fares database, it becomes a historical contract and is no longer available for use by end users.

Distribution Groups

A distribution group is one or more organizations and/or locations that have the same security level (ability to view, update, redistribute, sell or ticket).

There are two types of distribution groups:

1. Global - a global distribution group is one that is available to any user within a given supplier code, for use with any contract within that supplier code.
2. Contract specific - a contract-specific distribution group is associated with a particular contract and does not display globally.

Agency Private Fares enables users to set up global distribution groups so that the contracts they create can be distributed to other suppliers. Global distribution groups can be used in any contract, and every distribution group has its own unique name.

Distribution groups can be built according to:

- Travel agency Pseudo City Code (PCC) or IATA Number.
- Geography – users have the option of distributing fares to all Galileo or Apollo agencies in a geographic region.
- Travel Agency and Geography – users have the option of distributing fares for specific travel agencies within a geography that is specified options.
- All Agencies – allowing users to distribute fares for all travel agencies within the selected GDS (Galileo or Apollo)

Uploading Distribution Groups Using APF XML Interface

The APF XML Interface's APF_DistributionRQ is used to create, update, or delete global distribution groups on the Agency Private Fares database.

Distribution Groups can be updated in two ways, by either using "Update" to totally replace the current distribution group with a new version or using "PartialUpdate" to only send the portions of the Distribution Group that require modification.

Contract-specific distribution groups are associated with a specific contract. Therefore, contract-specific distributions groups are managed using the APF_ContractRQ, and the contract-specific distribution group information is sent in the <Distributions> tag of the request.

APF returns the APF_DistributionRS response with a success or an error message, depending on whether the global distribution group was successfully created, updated, or deleted.

Note: If a global distribution group is deleted, all contracts that use that global distribution group remain active contracts. However, no new contracts can be created using the deleted global distribution group.

Zones

A zone is a collection of codes for cities, US states/CA provinces, country codes, or IATA areas that, when grouped together, make for faster loading of private fare contracts.

Zones are created independently of fare contracts which means that a zone can be used in any contract.

Uploading Zones Using APF XML Interface

The APF XML Interface's APF_ZoneRQ is used to create, update, or delete a zone on the APF database.

Zones can be updated in two ways, by either using "Update" to totally replace the current zone with a new version or using "PartialUpdate" to only send the portions of the zone that require modification.

APF returns the APF_ZoneRS response with a success or an error message, depending on whether the zone was successfully created, updated, or deleted.

Note: If a zone is deleted, all contracts that use that zone remain active contracts. However, no new contracts can be created using the deleted zone.

Addons

Addon fares can be linked to a Standard contract fare and are used to create a single through fare for fare display and pricing. The combination of the addon fare and the Standard contract fare is known as a "constructed fare". The addon fare can never be displayed or priced alone.

Within Agency Private Fares a user defines how the addon fare constructs with a Standard contract within the same supplier. Addon fares can construct using a specific contract rule ID, fare basis code or fare types; addon fares can also allow construction with all Standard contracts. A combination of rule ID and either fare basis or fare type can also be used to define the construction. The Standard contract must also allow the addon construction based on the permissions/combinations filed on the contract and equally the Addon Fare must allow its construction to the standard contract to create the constructed through fare.

Uploading Addons Using APF XML Interface

The APF XML Interface's APF_AddonRQ is used to create, update or discontinue an addon in the APF database.

Addon fares can be updated in two ways, by either using "Update" to totally replace the current addon fare with a new version or using "PartialUpdate" to only send the portions of the addon fare that require modification.

APF returns the APF_AddonRS response with a success or an error message, depending on whether the addon was successfully created or updated.

Note: You cannot delete an active addon fare. You can, however, update the addon fare and set the discontinued date to today's date. When the addon is extracted to the fares database, it becomes a historical addon fare and is no longer available for use by end users.

For More Information

For more information about either the Agency Private Fares product or the APF XML Interface, please see the online help. For an explanation and examples of OTA messages, see Open Travel Alliance™ (<http://www.opentravel.org/>). The schema version used is 2006A.

Document Revision

Version Number	Description	Date
1.0	Final Version	01 Nov 2006
2.0	Final Version (release 2)	22 September 2009

Appendix 1 - Agency Private Fares Graphical User Interface

To support the XML Interface there have been some updates to screens within the Agency Private Fares GUI. Changes have been made to the following screens within the Agency Private Fares GUI.

- Main Admin Module Homepage
- Supplier Profile Screen
- User Profile Screen
- Help Pages

Accessibility of these functions is controlled by user level authority; the new fields and permission levels are only available to Information Security level users only. Galileo level users are able to view these fields only.

Notes:

- Updated help pages are available to all user authority levels.
- XML Vendor Licensee Search function is available to Information Security and Galileo Level users only.

Example Screen Shot - Main Admin Module Homepage

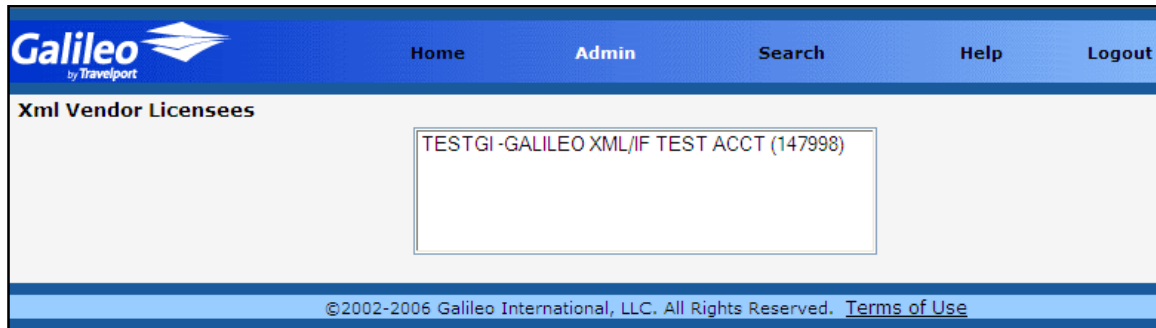
Update: View option to enable an internal user to view a list of all the XML Vendor Licensees.

Note: Applies to Galileo level users and above.

To display the list, a user must select the XML Vendor Licensee "View" option.

The screenshot displays the Galileo by Travelport Admin Module Homepage. The interface includes a blue header with the Galileo logo and navigation links: Home, Admin, Search, Help, and Logout. Below the header, there are several sections: 'Users' with a search field and buttons for 'Search', 'New User', 'Edit My Profile', and 'Search Terms of Use'; 'Suppliers' with a search field and buttons for 'Search' and 'New Supplier'; 'Change Supplier Code' with fields for 'Current Supplier Code' and 'Change Supplier Code to', and a 'Save' button; 'Xml Vendor Licensees' with a 'View' button circled in red; and 'Unlock Contract' with a large empty box and an 'Unlock' button. The footer contains copyright information and links for 'Terms of Use' and 'Privacy Policy'.

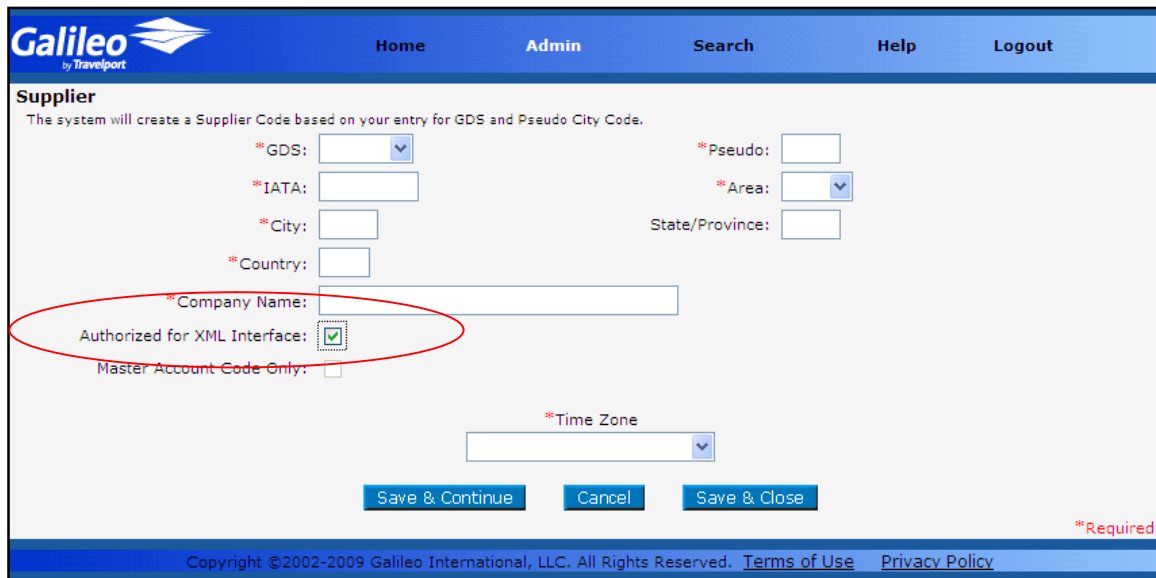
Example Screen Shot – XML Vendor Licensee Display



Example Screen Shot – Supplier Profile Screen

Update: New Flag “Authorized for XML Interface” – when a tick is displayed the supplier has been authorized to accept data sent via the XML Interface.

Note: This flag is only available for Information Security level users. Galileo level users are able to view this flag only.



Example Screen Shot – User Profile Screen

Update: New permission level “Agency XML Interface”

Notes:

- This permission level is only viewable when the supplier “Authorized for XML Interface” flag has been set in the Supplier profile screen.
- This flag is only available for Information Security level users. Galileo level users are able to view this flag only.

The screenshot displays the Galileo user profile management interface. The header includes the Galileo logo and navigation links: Home, Admin, Search, Help, and Logout. The main section is titled "User" and contains a form with the following fields:

- *User ID:
- *New Password:
- *First Name:
- Company Name:
- *Address 1:
- *City:
- Postal Code:
- *Phone:
- Mobile:
- *Email:
- *Permissions:
- *Supplier:
- *Re-enter New Password:
- *Last Name:
- Address 2:
- State/Province:
- *Country:
- FAX:
- Pager:

At the bottom of the form are three buttons: "Save & Continue", "Cancel", and "Save & Close". A red circle highlights the "Permissions" dropdown menu. The footer contains the copyright notice: "Copyright ©2002-2009 Galileo International, LLC. All Rights Reserved. [Terms of Use](#)". A red asterisk and the word "Required" are located in the bottom right corner.

APF GUI Help Pages

In support of the APF XML Interface, updates have been made to the following APF GUI help pages.

- Creating Supplier Codes
- Creating Users
- Deleting Users
- Editing Supplier Codes
- Editing Users
- Searching for Users
- Types of Users
- Users
- Viewing XML Vendor Licensees