

Air Price Points Quick Guide

Description

Air Price Points and Air Pricing Solutions specify how the pricing solution is returned in the Low Fare Search response. The prices in the response are the same, regardless of whether an AirPricePointList or AirPricingSolution response is returned. A Low Fare Shopping (LFS) response can contain either Air Pricing Solutions or Air Price Points, but not both.

Air Price Points provide a price with a set of flight options for each leg of a journey, which in turn provides a more compact result for the Universal API provider results. When triggered in the Low Fare Search request, the response provides a list of prices with a list of flight options for each Origin and Destination that can be combined with each other to form an itinerary solution that meets that price. Air Pricing Solutions, on the other hand, works out each combination of flights and presents them individually as a solution.

If you choose to return Air Price Points, the Universal API takes all the qualifying flights for outbound and inbound and presents them as one price, which you then break out into the combination you want. Important: The Price Points solution should not be confused with one way itineraries. Price Points is not the same as two one-way fares that are not combinable, which will be supported as part of Split Ticketing Search.

Benefits

Air Price Points is a more condensed way to show Low Fare Search results. Various segment-level flight options on a given airline can be interchanged at a price. In this way, we return less data by not exploding out every pricing combination into individual solutions, leading to a smaller payload. Returning less data usually results in a **faster response time**.

The response is also **organized more efficiently** in a non-overlapping, non-duplicated way that provides greater **flexibility** for how the data can be presented. For example, many online travel agencies (OTAs) display all outbound flight options for a specific price point and allow their customer to first select an outbound option before selecting an inbound option. **Most of our OTAs prefer the Air Price Point solution display.** However, an Air Price Point response does require an agency to build out explicit itinerary solutions in order to show complete itinerary options to their end-customers, and also requires a few additional logic checks. More information can be found in the Universal API Help.

How do you use Air Price Points?

This feature applies to Travelport Galileo (1G), Travelport Apollo (1V), Travelport Worldspan (1P), and the Airline Content Hub (ACH). Air Price Points applies to the LowFareSearch Universal API message.

Universal API request	Base request extension	Request attribute(s)
LowFareSearch	LowFareSearch	@SolutionResult="false" or leave blank

A Low Fare Shopping response can contain either Air Pricing Solutions or Air Price Points, but not both.

- **For 1G, 1V, and 1P:** The AirPricePointList returns a price and a list of flights for each leg that can be combined to create a complete itinerary at that price.
- **For ACH:** AirPricePointList return prices and flights for the complete itinerary or for each leg of the itinerary separately, depending on the *PreferCompletelitinerary* and *SolutionResult* settings in the request. Because Universal API combines ACH flights for complete itineraries, some combinations are returned that may not be bookable, due to supplier restrictions.

If you do choose to return Air Price Points, Universal API takes all the qualifying flights for outbound and inbound and presents them at one price, which can then be exploded into the desired combinations.

Important: Air Price Points should not be confused with one way itineraries. Air Price Points is *not* the same as grouping two non-combinable one-way fares, which is not advised, as it may cause price differences.

Each price point is a unique pattern, and every segment in the Air Price Point must meet that same carrier and route criteria. There can be different carriers contained in the Air Price Point flight options as long as the flight pattern criteria is met – in these cases, combinability criteria are also met. It is also advised that a developer builds logical checks to ensure that combinations of price point flight options make sense, as it is possible to see arrival times of one flight option after the departure time of the flight option.

Example—Round trip flight from Austin, TX to London, UK:

- The first Air Price Point may be \$500, with non-stop flight options on AA for AUS-LON and LON-AUS.
- The next Air Price Point may be \$500, with connecting flight options on DL through DFW, such as AUS-DFW-LON on the outbound, and LON-DFW-AUS on the inbound.
- Another Air Price Point may be \$400, with connecting flight options on AA through SFO, such as AUS-SFO-LON on the outbound, and a non-stop LON-AUS DL flight on the inbound.

Request

1. Enter the minimum required data for the [LowFareSearchReq](#).
2. Use **@SolutionResult** to request Air Pricing Solutions or Air Price Points in the response.
 - Set @SolutionResult="false" or leave blank to return Air Price Points in AirPricePointList. The default in Air v30.0 and greater is "false". In Air v29.0 and earlier the default is "true", which returns AirPricingSolution.
 - Set @SolutionResult="true" to return Air Pricing Solutions in AirPricingSolution, which works out each combination of flights and presents them individually as a solution.

There are several other attributes that can be included with the request, that interact with Air Price Points:

- **PreferCompletelitinerary.** If PreferCompletelitinerary="true", sectors are used to create a whole itinerary. If PreferCompletelitinerary="false", sectors are returned individually. Set @SolutionResult="false" and @PreferCompletelitinerary="false" to return Air Price Point results that give Flight Options for each leg of the itinerary separately.
- **AirSearchModifiers/MaxSolutions.** MaxSolutions specifies the maximum number of Air Price Points or Air Pricing Solutions to be returned. If the specified value exceeds the maximum as listed below per Provider, a warning is returned along with the maximum allowable results:
 - **1G, 1V.** Valid values are 1 to 1000.

- **1P.** MaxSolutions for Air Price Points not currently supported.
- **ACH.** Valid values are 1 to 1000 (per carrier/adaptor).
- **Exceptions:** Air Price Points is not compatible with EnablePointToPointSearch, EnablePointToPointAlternates and MaxNumberOfExpertSolutions.

XML Request example – Use SolutionResult="false" (highlighted in yellow) to get Air Price Points:

```
<LowFareSearchReq xmlns="http://www.travelport.com/schema/air_v35_0" TraceId="17901ded-640b-44a6-a30b-87912b4b9c0a"
SolutionResult="false" TargetBranch="P1875761" ReturnUpsellFare="true">
  <BillingPointOfSaleInfo xmlns="http://www.travelport.com/schema/common_v35_0" OriginApplication="uAPI" />
  <SearchAirLeg>
    <SearchOrigin>
      <CityOrAirport xmlns="http://www.travelport.com/schema/common_v35_0" Code="DEN" PreferCity="true" />
    </SearchOrigin>
    <SearchDestination>
      <CityOrAirport xmlns="http://www.travelport.com/schema/common_v35_0" Code="ATL" PreferCity="true" />
    </SearchDestination>
    <SearchDepTime PreferredTime="2016-07-09" />
  </SearchAirLeg>
  <SearchAirLeg>
    <SearchOrigin>
      <CityOrAirport xmlns="http://www.travelport.com/schema/common_v35_0" Code="ATL" PreferCity="true" />
    </SearchOrigin>
    <SearchDestination>
      <CityOrAirport xmlns="http://www.travelport.com/schema/common_v35_0" Code="DEN" PreferCity="true" />
    </SearchDestination>
    <SearchDepTime PreferredTime="2016-07-13" />
  </SearchAirLeg>
  <AirSearchModifiers>
    <PreferredProviders>
      <Provider xmlns="http://www.travelport.com/schema/common_v35_0" Code="1G" />
      <Provider xmlns="http://www.travelport.com/schema/common_v35_0" Code="ACH" />
    </PreferredProviders>
  </AirSearchModifiers>
  <SearchPassenger xmlns="http://www.travelport.com/schema/common_v35_0" Code="ADT" Age="40" DOB="1976-06-05" />
  <AirPricingModifiers FaresIndicator="PublicFaresOnly" />
</LowFareSearchReq>
```

Response

When **SolutionResult="false"**, the Low Fare Search response includes AirPricePointList with the AirPricePoint element.

Response exceptions for ACH only:

- **@CompleteItinerary** is returned and set to false if a carrier/adaptor does not return adequate results to form a complete itinerary. If the result is a complete itinerary, the flag is not returned. This attribute is currently only used for ACH, and will be extended as part of Split Ticketing Search.
- **HostToken** information, which is required for ACH, is provided here in the Air Price Points structure: AirPricingInfo/FlightOptionsList/FlightOption/Option/BookingInfo
- The AirSegment/AirAvailInfo/FareTokenInfo is not returned for ACH responses with Air Price Points.
- At this time, Universal API only returns complete itinerary Air Price Points using results from a single ACH adaptor (generally equivalent to a carrier). Universal API does not combine flights from multiple ACH carriers to create multiple AirPricePoint results. The ability to mix and match across ACH adaptors

will be delivered as part of Split Ticketing Search – where Travelport will offer the ability mix and match segments across ACH and other Travelport Providers.

XML Response Example – many flight options under one Air Price Point (two <option> elements for the

outbound **highlighted in yellow**, and two for the inbound, **highlighted in blue**):

```
<air:AirPricePoint Key="Z/HI1aVVRKC6JdTRK3rN7Q==" TotalPrice="GBP271.70"
BasePrice="USD330.24" ApproximateTotalPrice="GBP271.70"
ApproximateBasePrice="GBP229.00" EquivalentBasePrice="GBP229.00" Taxes="GBP42.70"
ApproximateTaxes="GBP42.70" CompleterItinerary="true">
```

```
<air:AirPricingInfo Key="HUQDle7oQrS0alPxsu8oHA==" TotalPrice="GBP271.70"
BasePrice="USD330.24" ApproximateTotalPrice="GBP271.70"
ApproximateBasePrice="GBP229.00" EquivalentBasePrice="GBP229.00" Taxes="GBP42.70"
LatestTicketingTime="2016-06-07" PricingMethod="Guaranteed" ETicketability="Yes"
PlatingCarrier="UA" ProviderCode="1G">
```

```
<air:FareInfoRef Key="D/UIHGEiRQOJr9cdHgg5Bg==" />
```

```
<air:FareInfoRef Key="zLR3RLeUR6KWJHUNLNvpMg==" />
```

```
<air:TaxInfo Category="AY" Amount="GBP7.80" />
```

```
<air:TaxInfo Category="US" Amount="GBP17.20" />
```

```
<air:TaxInfo Category="XF" Amount="GBP9.30">
```

```
<common_v35_0:TaxDetail Amount="USD4.50" OriginAirport="DEN" />
```

```
<common_v35_0:TaxDetail Amount="USD4.50" OriginAirport="ORD" />
```

```
<common_v35_0:TaxDetail Amount="USD4.50" OriginAirport="ATL" />
```

```
</air:TaxInfo>
```

```
<air:TaxInfo Category="ZP" Amount="GBP8.40">
```

```
<common_v35_0:TaxDetail Amount="USD4.00" OriginAirport="DEN" />
```

```
<common_v35_0:TaxDetail Amount="USD4.00" OriginAirport="ORD" />
```

```
<common_v35_0:TaxDetail Amount="USD4.00" OriginAirport="ATL" />
```

```
</air:TaxInfo>
```

```
<air:FareCalc>DEN UA X/CHI UA ATL Q DENATL9.30 140.47LAA14AKN UA DEN
180.47SAA00AXN USD330.24END</air:FareCalc>
```

```
<air:PassengerType Code="ADT" Age="40" />
```

```
<air:ChangePenalty>
```

```
<air:Amount>GBP138.00</air:Amount>
```

```
</air:ChangePenalty>
```

```
<air:FlightOptionsList>
```

```
<air:FlightOption LegRef="ckok540rRm2IYLV2EN4nkA==" Destination="ATL"
Origin="DEN">
```

```
<air:Option Key="gxyysbakQ06gGBdAFDzj9g==" TravelTime="P0DT5H42M0S">
```

```
<air:BookingInfo BookingCode="L" BookingCount="9" CabinClass="Economy"
```

```
FareInfoRef="D/UIHGEiRQOJr9cdHgg5Bg==" SegmentRef="dTADrVfxRySMKJvuTLVPWg==" />
```

```
<air:BookingInfo BookingCode="L" BookingCount="5" CabinClass="Economy"
```

```
FareInfoRef="D/UIHGEiRQOJr9cdHgg5Bg==" SegmentRef="FQR/eof2TxCFgDhiC1clg==" />
```

```
<air:Connection SegmentIndex="0" />
```

```
</air:Option>
```

```
<air:Option Key="jbCoLLq3R4Gec/JA7wO3WQ==" TravelTime="P0DT8H5M0S">
```

```
<air:BookingInfo BookingCode="L" BookingCount="9" CabinClass="Economy"
```

```
FareInfoRef="D/UIHGEiRQOJr9cdHgg5Bg==" SegmentRef="dTADrVfxRySMKJvuTLVPWg==" />
```

```
<air:BookingInfo BookingCode="L" BookingCount="7" CabinClass="Economy"
```

```
FareInfoRef="D/UIHGEiRQOJr9cdHgg5Bg==" SegmentRef="JOSAaWEXSKS7gaS0K3Wig==" />
```

```
<air:Connection SegmentIndex="0" />
```

```
</air:Option>
```

```
</air:FlightOption>
```

```
<air:FlightOption LegRef="ost+DsRaQreVNPINLveETQ==" Destination="DEN"
Origin="ATL">
```

```
<air:Option Key="qBBGO/u3RhCRx0FKxUnP6w==" TravelTime="P0DT3H26M0S">
```

```
<air:BookingInfo BookingCode="S" BookingCount="9" CabinClass="Economy"
```

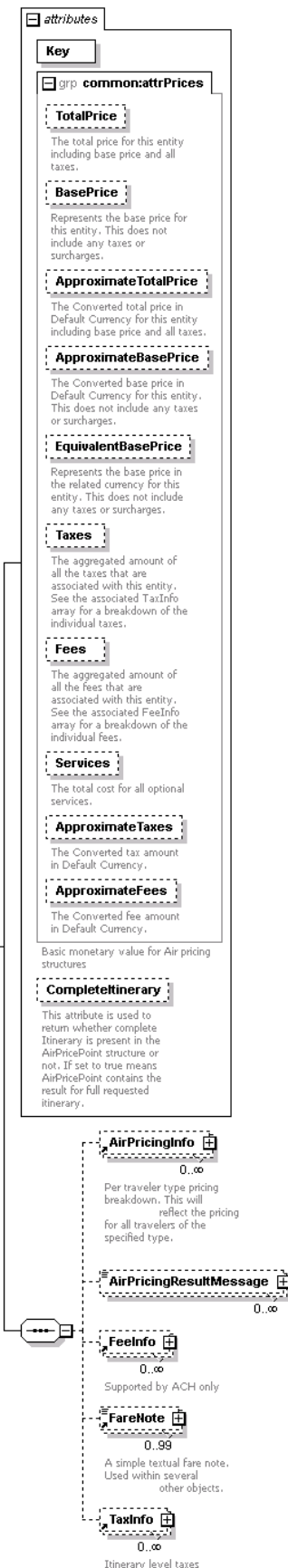
```
FareInfoRef="zLR3RLeUR6KWJHUNLNvpMg==" SegmentRef="pmbPnrwzRlulUrXBrkHiw==" />
```

```
</air:Option>
```

```
<air:Option Key="fkr3e3R4QJevmgem0Hjd3w==" TravelTime="P0DT3H28M0S">
```

```
<air:BookingInfo BookingCode="S" BookingCount="9" CabinClass="Economy"
```

```
FareInfoRef="zLR3RLeUR6KWJHUNLNvpMg==" SegmentRef="tNx7O6CUTrOeExVi0hLP8Q=="
```



```

</air:Option>
</air:FlightOption>
</air:FlightOptionsList>
</air:AirPricingInfo>
</air:AirPricePoint>

```

Where to Learn More

You can read about Air Price Points in the **Universal API Help**, including request and response schema snippets, and a list of provider exceptions. Browse to <https://support.travelport.com/webhelp/uapi/uAPI.htm> and then follow the Table of Contents to get to the Air Price Points section:

Air → Low Fare Shopping → Low Fare Shopping (Asynchronous) → Low Fare Shopping by Air Price Points

We also feature Price Points on our **Universal API Demo site**: <https://demo.travelportuniversalapi.com/>. Just do a roundtrip search with Travelport System (GDS) selected as the provider and you will see Air Price Points automatically returned (it's the default) in the result set. You can also see how Air Price Points work when mixing in API-connected carriers via Travelport's ACH, by selecting the "ACH" search box also.

The screenshot shows the 'Shop Results' page for a roundtrip search from DEN to ATL on 09/07/2016. The page is divided into several sections:

- Header:** Includes navigation links like 'SHOP', 'RETRIEVE UNIVERSAL RECORD', and 'LOGS'. A search bar shows the route 'DEN to ATL 09/07/2016 - 13/07/2016'.
- Filters:** A 'Show: ALL' dropdown is visible.
- Flight Results:**
 - Frontier:** Direct flights with prices ranging from \$253 to \$340.
 - Southwest:** Direct flights with prices ranging from \$254 to \$269.
 - United:** Multiple flight options including 'United Economy' and 'United Economy®' with prices ranging from \$238 to \$272.
 - Delta:** Main Cabin flights with prices ranging from \$217 to \$244.
 - American:** Choice Economy flights with prices ranging from \$259 to \$771.
- Outbound Options:** A section titled 'SELECT AN OUTBOUND OPTION' showing specific flight details for United, including flight numbers (532, 1489, 1286), aircraft types (Airbus A320-100/200, Boeing 737-900), and journey times.
- Cart:** A 'Cart' button is visible in the top right corner, indicating 'Your Cart is Empty'.

Universal API Demo site – shopping results with Air Price Point options