

Extreme Search

The Extreme Search Web API will quickly scan a database of cached fares across a date range for a given city pair. It is REST API with JSON responses.

Security Authorization Header

The API authenticates all requests via an http header. You must calculate the header authorization credential from your Fareportal username and password by creating a Base64 string encoding of username + ":" + password. The expected headers are:

- "Authorization", "Basic 78fp9NfdTV23IF5fdsGVHJ5V9jioHjk9" (Base64 of username:password)
- "Accept-Encoding", "application/gzip" (this is optional)

Here is sample .NET code for creating the credential and adding the headers to a request:

```
string username = "Your username";
string password = "Your password";
string svcCredentials =
Convert.ToBase64String(ASCIIEncoding.ASCII.GetBytes(username + ":" +
password));
request.Headers.Add("Authorization", "Basic " + svcCredentials);
request.Headers.Add("Content-Type", "application/json");
request.Headers.Add("Accept-Encoding", "application/gzip"); (optional)
```

Request Format

Here is the request URL format:

<https://api-dev.fareportallabs.com/dmsfareproviderhackathon/api/v1/FareProvider/#FromAirport/#ToAirport/#ToCountries/#ToRegions/#MaxPrice/#Currency/#StartDate/#EndDate/#FromDays/#Duration/#Flexibility/#IsNonStopOnly/#IsWeekendOnly/#PortalId/#AffiliateCode/#TripType/#RollUp/#Provider/#ClientId>

Field name	Expected values	Req'd?	Example Value
FromAirport	An IATA 3-letter city or airport code	Yes	NYC
ToAirport	An IATA 3-letter city or airport code	Yes	LAX
MaxPrice	Max price for the search	Yes	500
Currency	3 letter currency code	Yes	USD
StartDate	Start date of the search in mm-dd-yyyy format	Yes	01-24-2018
EndDate	End date of the search in mm-dd-yyyy format	Yes	01-27-2018

FromDays	Comma-separated list of the possible weekdays of departure	Yes	MO,TU,WE,TH,FR,SA,SU
Duration	Length of trip in days	Yes	3
Flexibility	Number of days of flexibility for duration	No	1 [would mean duration is 2-4 on a 3-day trip]
IsNonStopOnly	True for nonstop flights	No	true
IsWeekEndOnly	True for outbound starting only on Sat/Sun	No	true
PortalId	Should be 104	Yes	104
AffiliateCode	Text that can be tracked with the search for debugging and analytics	No	BestFlightsApp
TripType	2 for round trip 1 for one Way	Yes	2
RollUp	Grouping results across date ranges, per destination = 0, per week = 1, per departure day = 2, per stay duration = 3	Yes	0
Provider	Xsearch	Yes	Xsearch
ClientId	9d3b8dab-2792-4e4d-9afd-fcd1d3eb25c8	Yes	9d3b8dab-2792-4e4d-9afd-fcd1d3eb25c8

Sample Request URL:

<https://api-dev.fareportallabs.com/dmsfareproviderhackathon/api/v1/FareProvider/NYC/LAX/null/null/15000/USD/Jan-24-2018/Jan-27-2018/MO,TU,WE,TH,FR,SA,SU/5/0/false/false/104/22/2/2/XSearch/9d3b8dab-2792-4e4d-9afd-fcd1d3eb25c8>

Response Format

Response Object :

```
{
  "Errors": [],
  "IsSucceeded": true,
  "From": "NYC",
  "To": "LAX",
  "Currency": "USD",
  "UniqueResponseID": "Ref:k0TNiuQaP0-4GufMRFbGZQ", // Used for debugging
  "YMSApplied": true, // Can be ignored
  "SearchResults": [
    {
      "To": "LAX",
```

```

    "TotalFare": 331.4,
    "DepartureDate": "01/24/2018",
    "ReturnDate": "01/29/2018",
    "DestinationType": null, // Can be ignored
    "FareBasisCode": "OUAJZNN3-RP-OUAJZNN3-RP", // Use for debugging
    "IsNonStop": true,
    "OriginAirportCode": null, // Can be ignored
    "DestinationAirportCode": null, // Can be ignored
    "Recommendations": [
      {
        "Recommendation": "Flight Duration",
        "Fare": null,
        "Code": "EFT",
        "Value": "1131" // Length of flight in HHMM
      },
      {
        "Recommendation": "Popular",
        "Fare": null,
        "Code": "MPO",
        "Value": "31" // Number of ratings for the route
      }
    ]
  },
  {
    "To": "LAX",
    "TotalFare": 331.4,
    "DepartureDate": "01/25/2018",
    "ReturnDate": "01/30/2018",
    "DestinationType": null, // Can be ignored
    "FareBasisCode": "OUAJZNN3-RP-OUAJZNN3-RP",
    "IsNonStop": true,
    "OriginAirportCode": null, // Can be ignored
    "DestinationAirportCode": null, // Can be ignored
    "Recommendations": [
      {
        "Recommendation": "Flight Duration",
        "Fare": null,
        "Code": "EFT",
        "Value": "1131" // Length of flight in HHMM
      },
      {
        "Recommendation": "Popular",
        "Fare": null,
        "Code": "MPO",
        "Value": "27" // Number of ratings for the route
      }
    ]
  },
  {
    "To": "LAX",
    "TotalFare": 331.4,
    "DepartureDate": "01/26/2018",
    "ReturnDate": "01/31/2018",
    "DestinationType": null, // Can be ignored

```

```

    "FareBasisCode": "OUAJZNN3-RP-OUAJZNN3-RP",
    "IsNonStop": true,
    "OriginAirportCode": null, // Can be ignored
    "DestinationAirportCode": null, // Can be ignored
    "Recommendations": [
      {
        "Recommendation": "Flight Duration",
        "Fare": null,
        "Code": "EFT",
        "Value": "1131" // Length of flight in HHMM
      },
      {
        "Recommendation": "Popular",
        "Fare": null,
        "Code": "MPO",
        "Value": "48" // Number of ratings for the route
      }
    ]
  },
  {
    "To": "LAX",
    "TotalFare": 331.4,
    "DepartureDate": "01/27/2018",
    "ReturnDate": "02/01/2018",
    "DestinationType": null, // Can be ignored
    "FareBasisCode": "OUAJZNN3-RP-OUAJZNN3-RP",
    "IsNonStop": true,
    "OriginAirportCode": null, // Can be ignored
    "DestinationAirportCode": null, // Can be ignored
    "Recommendations": [
      {
        "Recommendation": "Flight Duration",
        "Fare": null,
        "Code": "EFT",
        "Value": "1129" // Length of flight in HHMM
      },
      {
        "Recommendation": "Popular",
        "Fare": null,
        "Code": "MPO",
        "Value": "28" // Number of ratings for the route
      }
    ]
  }
]
}

```