

API Reference

The HoundServer JSON Format

The HoundServer JSON Format is a subset of JSON values used to encode the JSON returned by the SoundHound Hound servers.

The HoundServer format uses JSON objects with the following fields:

Field Name	Type	Optional?	Default
"Format"	"SoundHoundVoiceSearchResult"	required	no default
	This field is a marker to verify that this is a value in this format.		
"FormatVersion"	"1.0"	required	no default
	This field specifies which version of this format is being used. The current version is 1.0. If a different version string is here, the format might not match what is documented here.		
"Status"	string enumeration (see below)	required	no default
	<p>Type details:</p> <p>This field uses only a fixed, finite number of JSON strings to encode an enumeration.</p> <p>The legal values are:</p> <ul style="list-style-type: none">"OK" -- The server was able to process the request properly."Error" -- The server ran into an error while trying to process the request.		
"ErrorMessage"	string	optional	no default
	If the "Status" was "Error", then this field will be present to give a human-readable explanation of what went wrong.		

"NumToReturn"	integer >= 0	optional	no default																	
	If the "Status" was "OK", then the server received a proper request and processed it, and this field will be present to specify how many possible results it is returning.																			
"AllResults"	array (see below)	optional	no default																	
	If the "Status" was "OK", then the server received a proper request and processed it, and this field will be present to specify the possible results it came up with. The number of elements in the array will be equal to the value of the "NumToReturn" field.																			
	Type details: This field uses only JSON arrays. The array may have any number of elements. Each element of the array uses values of type CommandResult (CommandResult.html).																			
"Disambiguation"	object (see below)	optional	no default																	
	If the "Status" was "OK", then the server received a proper request and processed it, and this field will be present to specify information to help the client do disambiguous among the results being returned by the server in the "AllResults" array.																			
	Type details: This field uses JSON objects with the following fields:																			
	<table><tr><th>Field Name</th><th>Type</th><th>Optional?</th><th>Default</th></tr><tr><td rowspan="2">"NumToShow"</td><td>integer >= 1</td><td>required</td><td>no default</td></tr><tr><td colspan="3">This field tells the client how many of the results from "AllResults" should be shown to the user, for the user to choose among. If it is 1, then the server is suggesting not giving the user a choice and instead just showing the first result in "AllResults". If it is greater than one, the server is suggesting showing that many results and asking the user to choose among them. The elements of "AllResults" are ordered in preference from most preferred to least, so if this field has the value 3, the server is suggesting using the first three results from "AllResults".</td></tr><tr><td rowspan="2">"ChoiceData"</td><td>array (see below)</td><td>required</td><td>no default</td></tr><tr><td colspan="3"></td></tr></table>			Field Name	Type	Optional?	Default	"NumToShow"	integer >= 1	required	no default	This field tells the client how many of the results from "AllResults" should be shown to the user, for the user to choose among. If it is 1, then the server is suggesting not giving the user a choice and instead just showing the first result in "AllResults". If it is greater than one, the server is suggesting showing that many results and asking the user to choose among them. The elements of "AllResults" are ordered in preference from most preferred to least, so if this field has the value 3, the server is suggesting using the first three results from "AllResults".			"ChoiceData"	array (see below)	required	no default		
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"ChoiceData"	array (see below)	required	no default																	

This is an array with the number of elements specified by "NumToShow". For each element, it gives information for the corresponding element of "AllResults". This is information about that result that can be used to inform the disambiguous decision about which result to use.

Type details:
This field uses only JSON arrays. The array must have at least 1 element but may have any number of additional elements.

Each element of the array uses JSON objects with the following fields:

Field Name	Type	Optional?	Default	
"Transcription"	string	required	no default	
	This gives the transcription that led to the corresponding result in "AllResults". Sometimes, the different results in "AllResults" will come from different transcriptions of the audio and sometimes the different results will come from different parses of the same transcription. It is provided here so it can be presented to the user as one of the things we think he or she said.			
"ConfidenceScore"	float	required	no default	
	This gives an idea of how confident the server is that this particular interpretation of the query from the user is correct. It combines both information about how likely the server thinks it is the transcription is correct and how likely the server thinks it is that the parse of that transcription is correct.			
"FixedTranscription"	string	optional	no default	
	Under some circumstances, the server will make corrections to the transcription to give what it believes the user meant. This field contains this fixed transcription.			

Additional fields with other names are also allowed.

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"ResultsAreFinal"	array (see below)	optional	no default
	<p>This field must have exactly the same number of elements as the "AllResults" field, and the elements of "ResultsAreFinal" correspond to the elements of "AllResults". If the client didn't set "ResultUpdateAllowed" in the RequestInfo (RequestInfo.html), or set it to false, then the values in this array will always be true. If the client set "ResultUpdateAllowed" to true in the RequestInfo (RequestInfo.html), then some or all of these elements may be false. Each one that is false means the corresponding element of "AllResults" is not final and will be updated by a HoundUpdate (HoundUpdate.html) object. If any element of this array is false, the client should keep the connection open and wait for HoundUpdate (HoundUpdate.html) objects to come, even while it is displaying the preliminary information to the user.</p>		
	<p>Type details:</p> <p>This field uses only JSON arrays. The array may have any number of elements.</p> <p>Each element of the array uses only the JSON boolean value. It must be either the value true or the value false.</p>		
"BuildInfo"	BuildInfo (BuildInfo.html)	optional	no default
	<p>This field is used to send information about the details of the build of the server that generated this result. It is not required but highly recommended that each server put as much information here as possible. The data here shouldn't be relied on by the client. It is intended to help in debugging issues. If possible, all the information from this field should be included in bug reports.</p>		
"ServerGeneratedId"	string	optional	no default
	<p>The server may send a unique ID with each response. The client can then use this ID for logging events that should be associated with this response. For example, if the user thumbs up or thumbs down a response, the event should be associated with this ID.</p>		
"AudioLength"	rational >= 0.000000	optional	no default
	<p>This field is only present if the input is speech. It is the length of the audio input in seconds.</p>		

"RealSpeechTime"	rational >= 0.000000	optional	no default
	This field is only present if the input is speech. It is the amount of real time, in seconds, spent processing the speech.		
"CpuSpeechTime"	rational >= 0.000000	optional	no default
	This field is only present if the input is speech. It is the amount of CPU time, in seconds, spent processing the speech.		
"RealTime"	rational >= 0.000000	optional	no default
	This field is the amount of real time, in seconds, spent processing the query.		
"CpuTime"	rational >= 0.000000	optional	no default
	This field is the amount of CPU time, in seconds, spent processing the query.		

Additional fields with other names are also allowed.

Example

The text "tell me how many yen seventeen euros is worth" generates

```
{
  "Format": "SoundHoundVoiceSearchResult",
  "FormatVersion": "1.0",
  "Status": "OK",
  "NumToReturn": 1,
  "AllResults":
    [
      {
        "CommandKind": "CurrencyConverterCommand",
        "SpokenResponse": "2526 Japanese yen",
        "SpokenResponseLong": "17 euros is 2526 Japanese yen.",
        "WrittenResponse": "17.00 EUR is 2,525.83 JPY.",
        "WrittenResponseLong": "17.00 EUR is 2,525.83 JPY.",
        "AutoListen": false,
        "ConversationState":
          {
            "ConversationStateTime": 1360707446,
            "ResponseEntities":
              {
                "HowMuch":
                  [
                    {
                      "Quantity": 2.525831092539840e+03,
                      "Unit":
                        {
                          "SingularSpokenName": "yen",
                          "SingularWrittenName": "yen",
                          "PluralSpokenName": "yen",
                          "PluralWrittenName": "yen",
                          "Symbol": "\u00a5",

```

```
        "SymbolIsPrefix": true
      },
      "CurrencyCode": "JPY"
    }
  ],
},
"CommandKind": "CurrencyConverterCommand",
"CurrencyConverterCommandKind": "CurrencyConverterCommand",
"InputMonetaryAmounts":
[
  {
    "Code": "EUR",
    "Symbol": "\u20ac",
    "Amount": 17
  }
],
"OutputMonetaryAmounts":
[
  {
    "Code": "JPY",
    "Symbol": "\u00a5",
    "Amount": 2.525831092539840e+03
  }
]
},
"ViewType":
[
  "Native",
  "Template",
  "HTML",
  "None"
],
"TemplateName": "VerticalTemplateList",
"TemplateData":
{
  "TemplateName": "VerticalTemplateList",
  "Items":
  [
    {
      "TemplateName": "MultiColumnTable",
      "TemplateData":
      {
        "TemplateName": "MultiColumnTable",
        "ColumnCount": 4,
        "ContentRows":
        [
          {
            "Columns":
            [
              {
                "Text": "EUR"
              },
              {
                "Text": "17"
              },
              {
                "Text": "JPY"
              },
              {
                "Text": "2525.83"
              }
            ]
          }
        ]
      }
    }
  ]
}
```

```

    }
  ]
}
},
"HTMLData":
{
  "HTMLHead":
  {
    "CSS": "<link rel=\"stylesheet\" href=\"//static.midomi.com/corpus/H_Zk82fGHFX/build/css/templates.min.css\">",
    "JS": "<script src=\"//static.midomi.com/corpus/H_Zk82fGHFX/build/js/templates.min.js\"></script>"
  },
  "SmallScreenHTML": "<div class='h-template h-multi-col-table-wrapper'>\n <table class='h-template-table h-multi-col-table pure-table pure-table-horizontal'>\n <tbody>\n <tr>\n <td class=h-template-cell>EUR\n </td>\n <td class=h-template-cell>17\n </td>\n <td class=h-template-cell>JPY\n </td>\n <td class=h-template-cell>2525.83\n </td>\n </tr>\n </tbody>\n </table>\n</div>\n",
  "LargeScreenHTML": "<div class='h-template h-multi-col-table-wrapper'>\n <table class='h-template-table h-multi-col-table pure-table pure-table-horizontal'>\n <tbody>\n <tr>\n <td class=h-template-cell>EUR\n </td>\n <td class=h-template-cell>17\n </td>\n <td class=h-template-cell>JPY\n </td>\n <td class=h-template-cell>2525.83\n </td>\n </tr>\n </tbody>\n </table>\n</div>\n"
},
"Hints":
{
  "Written":
  {
    "Hints":
    [
      {
        "Text": "Try converting an amount into multiple currencies.",
        "Priority": "Medium"
      },
      {
        "Text": "Did you know you can compare a currency to the current top currencies? You could ask something like \"compare pesos to the top five currencies\".",
        "Priority": "Medium"
      },
      {
        "Text": "You can also ask for a comparison between two currencies without providing a specific amount, for example by asking \"could you compare Canadian dollars with American dollars?\".",
        "Priority": "Medium"
      },
      {
        "Text": "From here you can convert this amount into another currency, for example by asking \"what about in Japanese yen?\".",
        "Priority": "Medium"
      }
    ]
  }
},
"NativeData":
{
  "Conversions":
  [
    {

```

```

        "InputValue":
        [
            {
                "Code": "EUR",
                "Symbol": "\u20ac",
                "Amount": 17
            }
        ],
        "OutputValue":
        [
            {
                "ConvertedValue":
                {
                    "Code": "JPY",
                    "Symbol": "\u00a5",
                    "Amount": 2.525831092539840e+03
                }
            }
        ]
    }
}
],
"Disambiguation":
{
    "NumToShow": 1,
    "ChoiceData":
    [
        {
            "Transcription": "tell me how many yen seventeen euros is worth",
            "ConfidenceScore": 7.500000000000000e-01,
            "FixedTranscription": "tell me how many yen seventeen euros is worth"
        }
    ]
},
"ResultsAreFinal":
[
    true
],
"BuildInfo":
{
    "User": "knightly",
    "Date": "Tue Jul 7 02:59:49 PDT 2015",
    "Machine": "s10766724502414.pnp.melodis.com",
    "SVNRevision": "24304",
    "SVNBranch": "dev_multi_machine",
    "BuildNumber": "1734",
    "Kind": "Low Fat",
    "Variant": "unknown"
}
}
{
    "Format": "SoundHoundVoiceSearchResult",
    "FormatVersion": "1.0",
    "Status": "OK",
    "NumToReturn": 1,
    "AllResults":
    [
        {
            "CommandKind": "NoResultCommand",

```



```

    "SpokenResponse": "",
    "SpokenResponseLong": "Didn't get that!",
    "WrittenResponse": "Didn't get that!",
    "WrittenResponseLong": "Didn't get that!",
    "AutoListen": false,
    "ViewType":
      [
        "Native",
        "None"
      ],
    "TranscriptionSearchURL": "http://www.google.com/#q=tell%20me%20how%20many%20yen%20
seventeen%20euros%20is%20worth"
  }
],
"Disambiguation":
{
  "NumToShow": 1,
  "ChoiceData":
    [
      {
        "Transcription": "tell me how many yen seventeen euros is worth",
        "ConfidenceScore": 7.500000000000000e-01,
        "FixedTranscription": "tell me how many yen seventeen euros is worth"
      }
    ]
  },
"ResultsAreFinal":
[
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"BuildInfo":
{
  "User": "knightly",
  "Date": "Tue Jul 7 02:59:49 PDT 2015",
  "Machine": "s10766724502414.pnp.melodis.com",
  "SVNRevision": "24304",
  "SVNBranch": "dev_multi_machine",
  "BuildNumber": "1734",
  "Kind": "Low Fat",
  "Variant": "unknown"
}
}

```