Dash Enhancement:
API and Import Specification Details

Technical Specification Document

Version: 2.1

Enterprise Platform and Services

Version History

Version #	Date	Section #	Action	Description	Author(s)
Draft	06/02/21	All	Create	Initial version	Mahesh Totagi

Contents

1   Introduction & Document Purpose

The purpose of this document is to notify the feature enhancements in dash and specification changes in APIs and dash Import Integration process.

2   Enhanced Feature and System Behavior

2.1   Dash API Versioning

Dash API has been enhanced to support multiple versions. The legacy version supports the initial specifications and the new versions supports the enhanced features.

- Dash API accepts an optional header parameter "**x-rlgy-version**" with every request made to the API.
- Existing consumers of dash API are not impacted, as in case the request is missing the version header then the API by default assigns the version header as "2020-06-01".
- Version header "2020-06-01" returns the response in the existing schema/ format. Thus, continuing the support to the existing version.
- Ability to access the new features - version 2.0 and onwards, is made available only through Apigee endpoints and with the valid version header.
- Backward compatibility to existing features (version 1.0), via Azure APIM endpoints and Apigee endpoints will be managed by defaulting the version header – "2020-06-01".
- API versions 1.0, 2.0 and onwards can be consumed using the existing Apigee endpoint dash | Realogy Developers Portal with same credentials.

Version	Version #	Value of 'x-rlgy-version'
Initial Version (Legacy)	1.0	2020-06-01
Enhanced Version	2.0	2021-01-01
Enhanced Version	2.1	2021-04-01

Please refer the document dashAPI version support details for the following details:

i.   List of endpoints supported in current version (version 1.0).
ii.   List of endpoints supported in new version (version 2.0 and onwards).
iii.   List of endpoints currently supported in existing version and will be deprecated in future.

2.2   Enhanced Dash Features

1. **Sort Agents in Listings:** An enhanced feature in dash that allow the inbound feeds to set the display order of agents in a listing. The display order is then exposed in the downstream through the API endpoints.

2. **Listing MLS Board Information:** dash currently provides an ability to associate Listing with MLS Id information. This is now extended to associate MLS board information along with MLS Id. MLS board (MLS code) should match with the list of acceptable values in dash.

3. **Person MLS Board Information:** dash provides an ability to associate Person with MLS Id information. Now the MLS Id can be associated with MLS board information. MLS board (MLS code) should match with the list of acceptable values in dash.

2.3 Sort Agents in Listings

2.3.1 Dash Import Feeds

The dash API schema for **Residential Sale, Residential Rental** and **Commercial Sale Listings** will be modified to add an optional field "**SequenceNumber**" in "**ListingParticipants**" collection in the Listing entity.

- The below highlighted optional collection will be added to the existing dash API Residential Sale, Rental and Commercial Sale schema for the Batch API methods.

```xml
<xs:element name="ListingPricing">
<xs:element minOccurs="0" default="AC" name="ListingStatus" nillable="true">
<xs:element minOccurs="0" name="PrimaryListingMLSID" type="xs:string" />
<xs:element minOccurs="0" name="PrimaryMLSBoard" nillable="true" type="xs:string" />
<xs:element minOccurs="0" name="ListingDates" nillable="true">
<xs:element minOccurs="0" name="MarketingInformation" nillable="true">
<xs:element minOccurs="0" name="Remarks" nillable="true">
<xs:element minOccurs="0" name="ListingParticipants" nillable="true">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="ListingParticipant" nillable="true">
        <xs:complexType>
          <xs:all>
            <xs:element minOccurs="0" name="Company" nillable="true">
            <xs:element minOccurs="0" name="Agent" nillable="true">
            <xs:element minOccurs="0" name="Person" nillable="true">
            <xs:element minOccurs="0" name="TeamGUID" nillable="true">
            <xs:element minOccurs="0" name="TeamIdentifier" nillable="true">
            <xs:element minOccurs="0" name="TeamProviderIdentifier" nillable="true">
            <xs:element minOccurs="0" name="IsPrimary" nillable="true" type="xs:boolean" />
            <xs:element minOccurs="0" maxOccurs="1" name="SequenceNumber" nillable="true" type="xs:positiveInteger" />
          </xs:all>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element minOccurs="0" name="OpenHouses" nillable="true">
<xs:element minOccurs="0" name="VirtualOpenHouses" nillable="true">
<xs:element minOccurs="0" name="MediaItems" nillable="true">
<xs:element name="Property">
```

PS: This new feature / collection is not supported in **RFG Common specification.**

2.3.2 Dash API

Dash API Listing Post, Put and Get operations will now support "**SequenceNumber**" in a new collection called "**listingAgents**". "listingAgents" collection will be supported in v2.1 and onwards. This new collection will accept both primary and secondary agents associated to the listing. Existing collections "primaryAgent" and "otherAgents" is supported in the earlier versions.

Real time API Get operations:
    a. CommercialLeaseListings_Get
    b. CommercialSaleListings_Get
    c. ResidentialRentalListings_Get
    d. ResidentialSaleListings_Get

Real time API Post and Put operations:
    a. CommercialSaleListings_Post

b. CommercialSaleListings_Put
c. ResidentialRentalListings_Post
d. ResidentialRentalListings_Put
e. ResidentialSaleListings_Post
f. ResidentialSaleListings_Put

2.3.3   Data Sync API

Listing API response will include "sequenceNumber" field in "agents" collection.

a. GetListingById
b. GetListingDelta

2.3.4   Search API

Listing API response will include "sequenceNumber" field in "agents" collection.

a. GetListingById
b. GetListings

2.3.5   Data Exports

Data Exports will continue to provide sequence number information as per the existing specifications.

2.4   Listing MLS Board Information

2.4.1   Dash Import Feeds

The dash API schema for **Residential Sale, Residential Rental** and **Commercial Sale Listings** will be modified to add an optional field "**Board**" in "**ListingMLSDetails**" collection and a new optional field "**PrimaryMLSBoard**" in the header collection to support "**PrimaryListingMLSID**" field.

- The below highlighted optional collection will be added to the existing dash API Residential Sale, Rental and Commercial Sale schema for the Batch API methods.

```
<xs:element name="ListingPricing">
  <xs:element minOccurs="0" default="AC" name="ListingStatus" nillable="true">
  <xs:element minOccurs="0" name="PrimaryListingMLSID" type="xs:string" />
  <xs:element minOccurs="0" name="PrimaryMLSBoard" nillable="true" type="xs:string" />
  <xs:element minOccurs="0" name="ListingDates" nillable="true">
  <xs:element minOccurs="0" name="MarketingInformation" nillable="true">
  <xs:element minOccurs="0" name="Remarks" nillable="true">
  <xs:element minOccurs="0" name="ListingParticipants" nillable="true">
  <xs:element minOccurs="0" name="OpenHouses" nillable="true">
  <xs:element minOccurs="0" name="VirtualOpenHouses" nillable="true">
  <xs:element minOccurs="0" name="MediaItems" nillable="true">
  <xs:element name="Property">
  <xs:element minOccurs="0" name="ListingFees" nillable="true">
  <xs:element minOccurs="0" name="ListingFeatures" nillable="true">
  <xs:element minOccurs="0" name="GeographicData" nillable="true">
  <xs:element minOccurs="0" name="CustomAttributes" nillable="true">
  <xs:element minOccurs="0" name="ListingMLSDetails" nillable="true">
    <xs:complexType>
      <xs:sequence>
        <xs:element maxOccurs="unbounded" name="MLSDetail">
          <xs:complexType>
            <xs:sequence>
              <xs:element minOccurs="0" name="ListingMLSId">
                <xs:simpleType>
                </xs:element>
              <xs:element minOccurs="0" name="Board" nillable="true" type="xs:string" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element minOccurs="0" name="ListingWebAddress" nillable="true">
  <xs:element minOccurs="0" name="Sellers" nillable="true">
  <xs:element minOccurs="0" name="ListingEvents" nillable="true">
  <xs:element minOccurs="0" name="SystemCustomAttributes" nillable="true">
```

2.4.2 RFG Import Feeds

The RFG Common specification currently supports Listing MLS Id including Board information. Please refer to the below spec details.

```
<xs:element name="ListingOffices">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="ListingOffice">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" name="OfficeGUID" nillable="true">
            <xs:element minOccurs="0" name="RFGCompanyId" nillable="true">
            <xs:element minOccurs="0" name="RFGOfficeId" nillable="true">
            <xs:element minOccurs="0" name="OfficeIdentifier" nillable="true">
              <xs:simpleType>
                <xs:restriction base="xs:string">
                  <xs:maxLength value="255" />
                  <xs:minLength value="0" />
                </xs:restriction>
              </xs:simpleType>
            </xs:element>
            <xs:element minOccurs="0" name="MLSId" nillable="true">
            <xs:element minOccurs="0" name="MLSName" nillable="true">
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element minOccurs="0" name="ListingParticipants" nillable="true">
<xs:element minOccurs="0" name="Events" nillable="true">
<xs:element minOccurs="0" name="VirtualEvents" nillable="true">
<xs:element minOccurs="0" name="MediaItems" nillable="true">
<xs:element name="Property">
<xs:element minOccurs="0" name="ListingFees" nillable="true">
<xs:element minOccurs="0" name="ListingMLSDetails" nillable="true">
  <xs:complexType>
    <xs:sequence>
      <xs:element maxOccurs="unbounded" name="MLSDetail">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" name="MLSBoardId" nillable="true" type="xs:string" />
            <xs:element minOccurs="0" name="MLSBoardName" nillable="true">
              <xs:simpleType>
            </xs:element>
            <xs:element name="ListingMLSId" nillable="true">
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element minOccurs="0" name="ListingWebAddress" nillable="true">
```

2.4.3   Dash API

Dash API Listing Post, Put and Get operations will now support an optional collection "**additionalMLSDetails**" and a new optional field "**PrimaryMLSBoard**" in the header collection to support "**primaryMLS**" field.

Real time API Get operations:
    a. CommercialLeaseListings_Get
    b. CommercialSaleListings_Get
    c. ResidentialRentalListings_Get
    d. ResidentialSaleListings_Get

Real time API Post and Put operations:
    a. CommercialSaleListings_Post
    b. CommercialSaleListings_Put
    c. ResidentialRentalListings_Post
    d. ResidentialRentalListings_Put
    e. ResidentialSaleListings_Post
    f. ResidentialSaleListings_Put

2.4.4   Data Sync API

Listing operations will return MLS board information in the existing "**mlsInformation**" collection.
    a. GetListingById
    b. GetListingDelta

2.4.5   Search API

Listing API will return "**mlsInformation**" collection.
    a. GetListingById
    b. GetListings

2.4.6   Data Exports

Data Exports will not be enhanced to expose MLS board information.

2.5   Person MLS Board Information

2.5.1   Dash Import Feeds

The dash API schema for **Company Staff** will be modified to a new optional field "**PrimaryMLSBoard**" in the header collection to support "**PrimaryMLSID**" field. MLS Board will be supported for additional MLS Id in the existing "**MLSDetails**" collection.

- The below highlighted optional collection will be added to the existing dash API Company Staff schema for the Batch API methods.

```xml
<xs:element minOccurs="0" name="EducationLevel" nillable="true">
<xs:element minOccurs="0" name="PrimarySpokenLanguage">
<xs:element minOccurs="0" name="PrimaryMLSID">
  <xs:simpleType>
</xs:element>
<xs:element minOccurs="1" name="PrimaryEmailAddress">
<xs:element minOccurs="0" name="ProviderIdentifier">
<xs:element minOccurs="0" name="PrimaryAddress" nillable="true">
<xs:element minOccurs="0" name="PrimaryPhoneNumber">
<xs:element minOccurs="0" name="PrimaryWebsite" nillable="true">
<xs:element minOccurs="0" name="AdditionalEmailAddresses" nillable="true">
<xs:element minOccurs="0" name="AdditionalPhoneNumbers" nillable="true">
<xs:element minOccurs="0" name="AdditionalWebsites" nillable="true">
<xs:element minOccurs="0" name="CustomAttributes" nillable="true">
<xs:element minOccurs="0" name="MediaItems" nillable="true">
<xs:element minOccurs="0" name="AdditionalNames" nillable="true">
<xs:element minOccurs="0" name="SpokenLanguages" nillable="true">
<xs:element minOccurs="0" name="SystemCustomAttributes" nillable="true">
<xs:element minOccurs="0" name="PrimaryMLSBoard" nillable="true" type="xs:string" />
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element minOccurs="0" name="AreaOfSpecializations" nillable="true">
<xs:element minOccurs="0" name="Designations" nillable="true">
<xs:element minOccurs="0" name="EmergencyContacts" nillable="true">
<xs:element minOccurs="0" name="Insurances" nillable="true">
<xs:element minOccurs="0" name="Licenses" nillable="true">
<xs:element minOccurs="0" name="MLSDetails" nillable="true">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="MLSDetail" nillable="true">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="MLSId" type="xs:string" />
            <xs:element name="Board" type="xs:string" />
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element minOccurs="0" name="Preferences" nillable="true">
```

2.5.2   RFG Import Feeds

The RFG Common Spec for **Office Staff** will have the support for an optional collection "**MLSDetails**". This collection accepts person MLS Id and MLS board code information.

- The below highlighted optional collection will be added to the existing Office Staff schema for the Batch API methods.

```xml
<xs:element minOccurs="0" name="MLSDetails" nillable="true">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="MLSDetail" nillable="true">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="MLSId" type="xs:string" />
            <xs:element name="Board" type="xs:string" />
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

2.5.3 Dash API

Dash API Company Staff Post, Put and Get operations will now support MLS Board code in "**mlsDetails**" collection.

Real time API Get operations:
   a. CompanyStaff_Get

Real time API Post and Put operations:
   a. CompanyStaff_Post
   b. CompanyStaff_Put

2.5.4 Data Sync API

Agent operations will return MLS board information in the existing "**mlsInformation**" collection.

   a. GetAgentById
   b. GetAgentDelta

2.5.5 Search API

Agent API will return MLS details in "**mlsInformation**" collection.

   a. GetAgentById

2.5.6 Data Exports

Data Exports will not be enhanced to expose MLS board information.

2.6 Dash Import Specifications

Revised dash import specifications are available at:

Commercial Listing Import Spec

Rental Listing Import Spec

Residential Listing Import Spec

Company Staff Import Spec

Office Staff Import Spec