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| State Farm Insurance Companies |
| HOME OWNERS QUOTE PURCHASE REST API |
| Design Document |
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| **Authorized User** |
| **7/31/2015** |

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| This document defines a REST API for the State Farm Home Owners Quote/Purchase application. This API implements HATEOS principles and also defines a Meta-Data schema used to provide clients the information needed create the user interface of the application at run time. |

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# Overview

The Home Owners Quote Purchase REST API will be used by client applications to access the home owners quote purchase functionality. Included in the API will be user interface descriptions that will allow a client to dynamically discover and build the User Interfaces for the application at run time. This additional UI information will define all the user interface screens that make up the Homeowners Quote Purchase application and the navigation paths between them. The API will implement HATEOS principles such that clients will not be bound to the business domain, i.e. the API will provide all the information needed to define current state in the application and the state transitions available to a user at any point in the application.

# Resource Model:

Root URI:

* http://fire.statefarm.com /HomeownersQuotePurchase-web/app/api

Resource URIs (relative to ROOT):

* /requests
* [/requests/{requestId}](http://api.homeownersquotepurchase.statefarm.com/quote/%7bquoteId%7d)
* /requests/{requestId}/requestData
* [/requests/{requestId}/requestData/{requestDataId}](http://api.homeownersquotepurchase.statefarm.com/quote/%7bquoteId%7d/screens/%7bscreenId%7d)
* /requests/{requestId}/requestData/{requestDataId}/data-fields
* [/requests/{requestId}/requestData/{requestDataId}/data-fields/{data-fieldId}](http://api.homeownersquotepurchase.statefarm.com/quote/%7bquoteId%7d/screens/%7bscreenId%7d/componentTypes%20/%7b%20componentTypeId%7d)

The request data is dynamic, meaning that the actual data fields associated with particular request data can vary. At any time the data fields can be assigned to a different request data. Examples of the different types of request data associated with the Home Owners Quote application are defined as follows:

* Welcome data (requestDataId = welcome)
* Personal Information data (requestDataId = personalInfo)
* Home Information data (requestDataId = homeInfo)
* Replacement Cost Method (requestDataId = replacementCostMethod)
* Replacement Estimate data (requestDataId = replacementEstimate)
* Quote data (requestDataId = quote)

# Return Data JSON Schema:

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* The data-field name attribute should map to a metadata name attribute, for example a data-field with a name of “address” should map to a similarly named metadata field of name “address”.
* The data-field, metadata and links sections consist of arrays of 1 or more entries, the metadata and links sections are required, the data-field section may or may not be present in the json.

# REST API

|  |  |
| --- | --- |
| **Title** | Start a Homeowners Quote (starts a quote request and returns the Welcome screen) |
| **URL** | /requests |
| **Method** | POST |
| **URL Params** | No data is passed as parameter in the URL. |
| **Data Params** | No data is passed in the body of the HttpRequest. |
| **Success Response** | This creates a new quote request and returns the request id and the welcome screen meta data, which describes the construction of the screen.  **response header:**    **response body:**            Welcome Info Screen Meta-Data                                   |
| **Error Response** | Code 404: Resource not found |
| **Sample Call** |  |
| **Notes** |  |

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| --- | --- |
| **Title** | Continue from Welcome Info (saves the current welcome info and returns Personal Info screen) |
| **URL** | /requests/{requestId}/requestData/welcome?rel=next |
| **Method** | POST |
| **URL Params** | rel = next  (used to indicate this POST is in response to a client requesting the next screen) |
| **Data Params** | Welcome model data is passed in the HttpRequest:  **request body:**                       |
| **Success Response** | This adds the data from the welcome screen to the quote identified with the given id and returns the personal info screen meta data which describes the construction of this screen.  **response header:**    **response body:**            Personal Info Screen Meta-Data                                                 |
| **Error Response** | Code: 404 (Resource not Found) |
| **Sample Call** |  |
| **Notes** |  |

|  |  |
| --- | --- |
| **Title** | Continue from Personal Info (saves the current personal info data and returns the Home Info screen) |
| **URL** | /requests/{requestId}/screens/personallinfo?rel=next |
| **Method** | POST |
| **URL Params** | rel=next  (used to indicate this POST is in response to client requesting the next screen) |
| **Data Params** | Personal Info model data passed in the HttpRequest:  **request body:**             |
| **Success Response** | **response header:**    **response body:**          Home Info Screen Meta-Data                                                 |
| **Error Response** | Code: 404 (Resource not Found) |
| **Sample Call** |  |
| **Notes** |  |
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| --- | --- |
| **Title** | Continue from Home Info (saves the current Home Info data and returns the Replacement Cost Method screen) |
| **URL** | /requests/{requestId}/screens/homeinfo?rel=next |
| **Method** | POST |
| **URL Params** | rel=next  (used to indicate this POST is in response to client requesting the next screen) |
| **Data Params** | Home Info model data passed in the HttpRequest:  **request body:**                             |
| **Success Response** | **response header:**    **response body:**          Replacement Cost Method Meta-Data                                                 |
| **Error Response** | Code: 404 (Resource not Found) |
| **Sample Call** |  |
| **Notes** |  |

|  |  |
| --- | --- |
| **Title** | Continue from Replacement Cost Method (saves the current replacement cost method and returns estimation screen) |
| **URL** | /requests/{requestId}/screens/replacementCostMethod?rel=next |
| **Method** | POST |
| **URL Params** | rel=next  (used to indicate this POST is in response to client requesting the next screen) |
| **Data Params** | replacement cost method model data passed in the HttpRequest:  **request body:**       |
| **Success Response** | **response header:**    **response body:**            Self-Estimation Meta-Data                                                 |
| **Error Response** |  |
| **Sample Call** |  |
| **Notes** |  |

|  |  |
| --- | --- |
| **Title** | Continue from Replacement Estimate (saves the current replacement estimate and returns Quote screen) |
| **URL** | /requests/{requestId}/screens/replacementEstimate?rel=next |
| **Method** | POST |
| **URL Params** | rel=next  (used to indicate this POST is in response to client requesting the next screen) |
| **Data Params** | replacement estimate model data passed in the HttpRequest:  **request body:**                         |
| **Success Response** | **response header:**    **response body:**            Quote Meta-Data                                   |
| **Error Response** |  |
| **Sample Call** |  |
| **Notes** |  |

|  |  |
| --- | --- |
| **Title** | Return to Welcome Info from Preceding Page (navigate to Welcome screen from the Personal Info page) |
| **URL** | /requests/{requestId}/requestData/personalInfo?rel=prev |
| **Method** | POST |
| **URL Params** | rel=prev  (indicates that the client is requesting the previous screen) |
| **Data Params** | Personal Info model data passed in the HttpRequest:  **request body:**             |
| **Success Response** | The server returns an HTTP response with the code 302, indicating a redirection along with the Location header.     |
| **Error Response** | Code: 404 |
| **Sample Call** |  |
| **Notes** |  |

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| --- | --- |
| **Title** | Retrieve Welcome Info ( gets current welcome data and returns welcome screen) |
| **URL** | /requests/{requestId}/requestData/welcome?rel=prev |
| **Method** | GET |
| **URL Params** | rel=prev  (indicates that the client is requesting the previous screen) |
| **Data Params** | No data passed in request |
| **Success Response** | Code: 200  JSON Quote Data Content:          Welcome Info Data        Welcome Info Screen                                   |
| **Error Response** |  |
| **Sample Call** |  |
| **Notes** |  |

|  |  |
| --- | --- |
| **Title** | Return to Personal Info from Preceding Page (navigate to Personal Info screen from the Home Info page) |
| **URL** | /requests/{requestId}/requestData/homeInfo?rel=prev |
| **Method** | POST |
| **URL Params** | rel=prev  (indicates that the client is requesting the previous screen) |
| **Data Params** | Home Info model data passed in the HttpRequest:  **request body:**                             |
| **Success Response** | The server returns an HTTP response with the code 302, indicating a redirection along with the Location header.     |
| **Error Response** |  |
| **Sample Call** |  |
| **Notes** |  |

|  |  |
| --- | --- |
| **Title** | Retrieve Personal Info ( gets current personal info data and returns Personal Info screen) |
| **URL** | /requests/{requestId}/requestData/personalInfo?rel=prev |
| **Method** | GET |
| **URL Params** | rel=prev  (indicates that the client is requesting the previous screen) |
| **Data Params** | Personal Info bean data passed in the HttpRequest:  No data passed in request |
| **Success Response** | Code: 200  JSON Quote Data Content:          Personal Info Data        Personal Info Screen Meta-Data                                                 |
| **Error Response** |  |
| **Sample Call** |  |
| **Notes** |  |

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| **Title** | Return to Home Info from Preceding Page (return back to the Home Info screen) |
| **URL** | /requests/{requestId}/screens/replacementCostMethod?rel=prev |
| **Method** | POST |
| **URL Params** | rel=prev  (indicates that the client is requesting the previous screen) |
| **Data Params** | Personal Info model data passed in the HttpRequest:  **response body:**       |
| **Success Response** | The server returns an HTTP response with the code 302, indicating a redirection along with the Location header.     |
| **Error Response** |  |
| **Sample Call** |  |
| **Notes** |  |

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| **Title** | Retrieve Home Info (gets current home info data and returns the Home Info screen) |
| **URL** | /requests/{requestId}/requestData/homeInfo?rel=prev |
| **Method** | GET |
| **URL Params** | rel=prev  (indicates that the client is requesting the previous screen) |
| **Data Params** | No data passed in request |
| **Success Response** |       Home Info Data        Home Info Screen Meta-Data                                                     |
| **Error Response** |  |
| **Sample Call** |  |
| **Notes** |  |

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| **Title** | Return to Replacement Cost Method from Preceding Page (return to the Replacement Cost Method screen) |
| **URL** | /requests/{requestId}/requestData/replacementEstimate?rel=prev |
| **Method** | POST |
| **URL Params** | rel=prev  (indicates that the client is requesting the previous screen) |
| **Data Params** | Replacement cost estimate model data passed in the HttpRequest:  **response body:**                           |
| **Success Response** | The server returns an HTTP response with the code 302, indicating a redirection along with the Location header.     |
| **Error Response** |  |
| **Sample Call** |  |
| **Notes** |  |

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| --- | --- |
| **Title** | Retrieve Replacement Cost Method (returns the replacement cost method screen) |
| **URL** | /requests/{requestId}/requestData/replacementCostMethod?rel=prev |
| **Method** | GET |
| **URL Params** | rel=prev  (indicates that the client is requesting the previous screen) |
| **Data Params** | No Data present in request |
| **Success Response** | **response header:**    **response body:**        Replacement Cost Method Data        Replacement Cost Method Meta-Data                                                 |
| **Error Response** |  |
| **Sample Call** |  |
| **Notes** |  |

|  |  |
| --- | --- |
| **Title** | Return to Replacement Estimate from Preceding Page (return to the Replacement Cost Method screen) |
| **URL** | /requests/{requestId}/requestData/replacementEstimate?rel=prev |
| **Method** | GET |
| **URL Params** | rel=prev  (indicates that the client is requesting the previous screen) |
| **Data Params** | No data present in the request |
| **Success Response** | **response header:**    **response body:**          Self-Estimation Data        Self-Estimation Meta-Data                                                 |
| **Error Response** |  |
| **Sample Call** |  |
| **Notes** |  |

# Appendix Meta-Data Definition:

## Welcome Info Screen Meta-Data



























































































## Personal Info Screen Meta-Data

























































































## Home Info Screen Meta-Data



















 

































































(



 







” 































## Replacement Cost Method Meta-Data















## Self-Estimation Meta-Data





























 

























































 























## Quote Meta-Data























# Appendix - Screen Data:

## Welcome Info Data





































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## Personal Info Data



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

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## Home Info Data



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

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



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

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

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

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

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## Replacement Cost Method Data

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



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## Self-Estimation Data

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

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



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

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

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## Quote Data