

Simplink

Trustmark Simplink Software Development Kit Guide

Version 2.1
July 2019



Voluntary Benefits

Legal Information

Copyright © 2019 Trustmark Insurance Company

This software and publication contains proprietary and confidential information and creative works owned by Trustmark Insurance and its licensors, if any. Any use, copying, distribution, display, modification or transmission of such publication in whole or in part in any form or by any means without the expressed written permission of Trustmark is strictly prohibited. Except where expressly prohibited by Trustmark in writing, the possession of this software shall not be construed to confer any license or rights under any Trustmark intellectual property rights whether by estoppel, implication or otherwise.

All copies of the technology and related information, if allowed by Trustmark, must display this notice of copyright and ownership in full.

All trademarks, trade names, service marks, and logos referenced herein belong to their respective companies

Table of Contents

LEGAL INFORMATION	2
INTRODUCTION	4
SIMPLINK WIDGET PROCESSING FLOW.....	4
SIMPLINK API PROCESSING FLOW	5
PREREQUISITES.....	6
SUPPORTED BROWSERS.....	6
INTEGRATION CHECKLIST.....	6
INVOCATION PARAMETERS.....	7
API INTEGRATION STEPS.....	10
PART 1: INVOCATION	11
<i>Invocation APIs</i>	11
<i>Call Access Token API</i>	11
<i>Invocation Data API</i>	11
<i>Postman Requests Access Token</i>	12
<i>Call Invocation API</i>	13
PART 2: REQUESTING ENROLLMENT APPLICATION DATA	15
<i>Postman Requests Access Token and Calls EnrollmentData API</i>	18
PART 3: SUCCESS, WAIVE AND COMPLETE ENROLLMENT URLS	19
<i>Success Service</i>	19
<i>Failure Service</i>	21
PART 4: INTEGRATING MASHUP CODE.....	22
TRUSTMARK PRODUCT PLAN DETAILS.....	24
TRUSTMARK ENROLLMENT DATA	25
EMPLOYEE RECORD.....	25
PRODUCT RECORD.....	25
DEPENDENT RECORD.....	26
BENEFICIARY RECORD.....	26
API ERROR RESPONSE	27
API ERROR RESPONSE MESSAGES	27
SKINNABILITY.....	28
SAMPLE CLIENT DATA	29

Introduction

Simplink provides seamless integration with the benefit administration (ben admin) systems of other companies, enabling employees/enrollers to enroll in Trustmark products without having to leave the hosting system. Simplink creates a skinnable widget that incorporates seamlessly into a hosting ben admin system. For a sample Simplink screen as it appears after being incorporated into a ben admin system, see Figure 3: Skinned Simplink Screen.

Simplink provides the following benefits:

- **Technology Companies** – Once implemented, minimal setup is needed for each additional employee added to the system, which saves time. And there is no need to provide Trustmark with enrollment files.
- **Brokers** – Simplink expands your ability to offer Trustmark’s full range of products and offerings. All Trustmark marketed products and all underwriting levels are available within the Widget, so there is no need to simplify or reduce offerings to meet a system requirement.
- **Employers** – HR staff and employers will save time with quicker issuance of policies and claim payments because enrollment data is housed in the Simplink widget. No database access is required.
- **Employees** – Eases employee enrollment and their ability to purchase the appropriate level of coverage to fit their needs.

Trustmark provides the Simplink SDK, which includes the necessary API to implement the Simplink Widget in your ben admin system.

Simplink Widget Processing Flow

The Simplink Widget is embeddable within your ben admin technology solution. It provides a holistic mashup solution, using content from several sources to generate a new source that is then displayed in the ben admin user interface, enabling integration with any ben admin technology solution and offering the following features:

- [Skinnability](#) (dynamic skin specific to client).
- Quick and secure setup.
- Minimal effort for integration because most of it is autonomous.

The following is the processing flow of the Simplink Widget:

1. Invocation data such as employee and dependent demographic information is sent from the host ben admin system to the Simplink Widget.
2. Enroller/employee can update the dependent summary, modify existing coverages and enroll in newly available products.
3. Eligibility and underwriting questions are dynamically displayed in the Widget based on the benefit amount, product and demographic information.
4. Rates are calculated based on the benefit amount and riders selected by the enroller and displayed for people insured.
5. A summary of the application details is displayed to enroller/employee to review and sign before submission.
6. Completed application details (exported as an enrollment xml file) are processed through the Trustmark system to generate a policy.

The following graphic shows the Simplink processing flow:



Note: Processing can be performed concurrently.

Simplink API Processing Flow

Behind the scenes, integration processing can proceed concurrently. For example, the Mashup code can be integrated (step 5) first and then the invocation parameters can be sent (step 1). We arranged processing in this way to make it easier to explain and understand:

1. Invocation parameters are sent.
2. Invocation API is called and processing occurs:
 - a. Call Invocation Data API
 - b. Call Access Token
 - c. Postman requests access token and calls invocation API
3. Widget consumes Enrollment Application Data:
 - a. Postman requests access token and calls the EnrollmentData API
4. Success or Fail URL is passed from Simplink to the ben admin system.
5. Mashup code is integrated.

Prerequisites

The Simplink API uses OAuth for security and renders output in JSON format. However, you can use any application for your security and Simplink will work with it seamlessly. In addition, you can use any development environment for your ben admin product. For testing and implementation purposes, we suggest using the Postman tool in a non-production environment.

Supported Browsers

Trustmark supports the following browsers:

- Microsoft Edge
- Internet Explorer 11 or above
- Google Chrome 45 or above
- Mozilla Firefox 52 or above
- Apple Safari latest version

All browsers must have cookies and JavaScript enabled. We recommend setting your browser to automatically update whenever it detects the availability of a new version of the browser. We support the current and previous major releases of Edge, Chrome, Firefox, Internet Explorer, and Safari on a rolling basis. Each time a new version is released, we begin supporting that version and stop supporting the third most recent version.

Integration Checklist

Trustmark offers technical support to ensure a timely, successful implementation. of Simplink. We recommend regular (at least weekly) check-ins to answer any questions and make sure we are meeting our timeline. Trustmark will provide Simplink contact information during initial meeting.

The following is a checklist that can help guide these meetings:

Step		Result/Notes
1	Trustmark provides the Software Development Kit (SDK) and gives an overview of Simplink.	Shows the ease with which the Simplink widget can be incorporated into the client's ben admin system. Trustmark highlights the advantages of using Simplink to offer Trustmark Insurance products (UNIV, CRIT, ACCI, DISA and HII, etc.).
2	Trustmark provides Client ID and Client Secret keys, APIs, and Mashup code (Simplink SDK). Note: Userid and password for mashup do not expire.	Demonstrates the simplicity and small footprint of Simplink.
3	Client runs Mashup code.	Displays a basic, empty Simplink widget as verification.
4	Client incorporates Simplink API and Mashup code into Ben admin system environment.	Client tests launching Simplink using invocation data from client's system.
5	Client runs a test application within Simplink.	Simplink enrollment screens for the specific product (UNIV, CRIT, ACCI, DISA and HII) display, allowing an application to be completed. Simplink screen color should match that of the ben admin system.

Step		Result/Notes
6	Client incorporates Simplink return API call into Ben admin system environment.	Completed Trustmark information is in ben admin system and a confirmation statement received.
7	Client checks in regularly (at least once a week).	Provides a question and answer session so client understands Simplink operations and processing.

Once integration fully tested with Ben admin in STG environment, Trustmark will send new client id, client Secret and mashup code pointing to production environment. Benadmin will use production client id to send the enrollment data.

Invocation Parameters

Below invocation parameters are input parameters from the host Ben Admin system.

- These parameters enable the enrollment process for the employee/enroller during the enrollment/re-enrollment process.

Note: Do not send JSON field keys as part of invocation call request if they have NULL/blank values. All mandatory fields are expected to pass both key and value.

Business Name	Description	Mandatory	Invocation Parameters (JSON)	Field Length	Values
Client Identification & Secure Token					
Client ID	This is how the client identifies themselves (for this specific enrollment). Ben Admin will have Trustmark client ID information.	Yes	ClientID	20 digit integer	0123456789
Client Name	Client Name is optional field	No	Client Name	50 Alpha Numeric	ABC Pharma
A client generated token that identifies the request	Token will be generated by Trustmark Widget for each request and same token will be passed back to Ben Admin system in response to have the same session.	Yes	Client Token	100 Alpha Numeric	c898cf90-3c0d-11e9-bd62-005056bc4630
Allow ClientEdits	Indicator to allow edit the dependent information. Default value is N	No	AllowClient Edits	Min – 0 and Max 1	Y OR N
Employee Details					
Employee SSN	Either SSN or employee ID must be provided at invocation	Conditional	Employee SSN	Min and Max - 9 Digit integer	012345678
Employee ID	Either SSN or employee ID must be provided at invocation	Conditional	Employee ID	64 string	0123456789
Employee First Name	First Name	Yes	Employee FirstName	Min – 1 String Max 100 String	john

Business Name	Description	Mandatory	Invocation Parameters (JSON)	Field Length	Values
Employee Middle Initial	Middle Initial	No	Employee Middle Name	Min – 0 String Max 10 String	M
Employee Last Name	Last Name	Yes	Employee LastName	Min – 1 String Max 100 String	Wick
Date of Birth	Birth Date	Yes	DateOf Birth	Min and Max – 8 String	20190303 YYYYMMDD
Gender	Gender of employee	Yes	Gender	Min – 1 Max – 2 Strings	M – Male F – Female
Date of Hire	Employee Hire Date	Yes	DateOf Hire	Min and Max – 8 String	20190303 YYYYMMDD
Employee Address					
Address Line1	Employee Address Information	Yes	Employee Address1	Min – 1 Max – 200 Strings	22 Waterbury Rd
Address Line2	Employee 2 nd Level of Address	No	Employee Address2	Min – 0 Max – 200 Strings	Near Robert factory
City	City	Yes	City	Min – 1 Max – 100 Strings	Montclair
State	State	Yes	State	Min – 1 Max – 100 Strings	IL
ZipCode	Zip code	Yes	ZipCode	Min – 1 Max – 10 Strings	07043
Location	Used to describe the nominal 'location' that the employee is associated with (this could be a physical place/city/town, but could be used to describe sub-organizations or classes of work, e.g. "bus drivers"). This is used for eligibility	No. If location is setup in Ben Admin, needs to be passed.	Location	Min – 1 Max – 100 Strings	Montclair
Contact Details					
Phone Number	Primary Phone Number	No	Phone Number	Min - 0 & Max – 20 Strings	0123456789
Primary Email	Primary Email Address	No	Email Address	Min – 0 Max – 100 Strings	a@a.com
Job Details					

Business Name	Description	Mandatory	Invocation Parameters (JSON)	Field Length	Values
Department	Used for billing purposes	No. If department is setup in Ben Admin, needs to be passed.	Department	Min – 1 Max – 50 Strings	Billing
Full Time or Part Time Employee	Indicator of full time/part time	No	FullOrPartTime	Min – 2 & Max – 3 String	PT or FT
Salary	For DI	No	Salary	Min – 1 Max – 50 integer	1234.00
Hours Worked by week	Integer value of hours worked weekly	Yes	Hours Worked	Min – 1 Max – 3 integer	10.00
Deduction Mode	Number of deductions to be made annually to cover the cost of premiums.	Yes	Deduction Mode	Min – 1 Max – 2 integer	52
Product Details					
Product Code	Trustmark product code selected to enroll. Only these 4 values are expected from the Ben Admin	Yes	Product Code	Min – 1 & Max – 50 String	UNIV, CRIT, ACCI, DISA, HII
Dependent Summary -					
Dependent ID	Yes - for each dependent (spouse, child, grandchild)		Dependent ID	Min – 0 & Max – 100 String	1234
Dependent ID					
Dependent First Name	Yes - for each dependent (spouse, child, grandchild)	No	Dependent FirstName	Min – 0 & Max – 100 String	Susan
Dependent Middle Name	Yes - for each dependent (spouse, child, grandchild)	No	Dependent MidName	Min – 0 & Max – 100 String	M
Dependent Last Name	Yes - for each dependent (spouse, child, grandchild)	No	Dependent LastName	Min – 0 & Max – 100 String	Wick
Dependent Date of Birth	Yes - for each dependent (spouse, child, grandchild)	No	DepBirthDate	Min and Max – 8 string	20190303 YYYYMMDD
Relationship	Yes - for each dependent (spouse, child, grandchild)	No	Relationship	Min – 0 & Max – 2 String	C – Child S – Spouse G – Grand Child DP – Domestic Partner
Dependent Gender	Yes - for each dependent (spouse, child, grandchild)	No	Dependent Gender	Min – 0 Max – 2 Strings	M – Male F – Female

API Integration Steps

This section provides more detail about the Simplink API integration and processing. The solution has handshake calls during the integration process. The integration proceeds in the following manner:

1. **Invocation**—Releasing invocation data from ben admin system.
2. **Requesting**—[Enrollment application data](#) is sent to Simplink when the enrollment process is complete.
3. **Adding mashup code (JavaScript)**—Displays the Simplink widget in the enrollment process flow of the ben admin system.
4. **Error handling**— the system displays basic error messages that can be modified by ben admin developers.

Note: These steps can proceed concurrently.

Part 1: Invocation

The connection process involves a secured Rest API service call in which the ben admin technical system authenticates the Simplink widget. Trustmark resources and the ben admin system's IT resources collaborate on the integration.

Invocation APIs

As part of the integration exercise, an authentication ID and API key will be provided by Trustmark. These values should be protected.

Trustmark recommends using OAuth2 authentication for secured connectivity. The ben admin system makes the following requests when sharing invocation parameters:

1. Call API to get a token value.
2. Use token value to access API with invocation parameters.

Call Access Token API

The ben admin system calls the access token API to get the token value, which will be valid for 5 minutes.

URL	https://dev-trustmark-oauthcc.cloudhub.io/access_token
Body	grant_type=client_credentials
Header	
Content Type	[{"key":"Content-Type","value":"application/x-www-form-urlencoded","description":"","type":"text","enabled":true}]
Authorization	Username (Client ID) - e153ab2f2c5446a488515785dc1157cb Password (Client Secret) - 3946F4756E95427b985b460Fe400e47d
Response in Body (Output)	{ "access_token": 7Am68xzYgjkWGEoem9LYCaqck_qUq0BrtxgU7TZkZymX2mVcCEcNIUtWOeTDHeUqUDdkMiGIDh0LYS4K2NVg", "token_type": "bearer", "expires_in": 300 }

Invocation Data API

When the ben admin system has received an access token value, it makes a second call to send the invocation parameter data. The following is a sample of the invocation data structure:

Note: The sample invocation relies on OAuth 2.0.

URL	https://qa-eapi-oauth.us-e1.cloudhub.io/api/benadmin_integration
Body	{ "ClientName":"High Gate Hotels", "ClientID":"123456789", "EmployeeSSN":"123456789", "EmployeeID":"12345000", "DateOfHire":"20191202", "FullOrPartTime":"FT", "HoursWorked":"40", "DateOfBirth":"20190301", "Gender":"M", }

	<pre> "EmployeeFirstName":"John", "EmployeeMiddleName":"S", "EmployeeLastName":"Wick", "Location":"Salt Lake", "Department":"Insurance", "Salary":"53256", "DeductionMode":"52", "EmployeeAddress1":"22 Waterbury", "EmployeeAddress2":"Near burylane", "City":"Montclair", "State":"NJ", "ZipCode":"07043", "ProductCode":"UNIV", "PhoneNumber":"1234567890", "EmailAddress":"hcf@trustmarkins.com", "AllowClientEdits": "Y", "Dependents":[{ "DependentID":"12345", "DependentFirstName":"Dep1", "DependentLastName":"Dep1_1", "DepBirthDate":"20190103", "Relationship":"C", "DependentGender":"M" }, { "DependentID":"12346", "DependentFirstName":"Dpe2", "DependentLastName":"Dpe2_2", "DepBirthDate":"20190102", "Relationship":"S", "DependentGender":"M" }] </pre>
Header	
Content Type	[[{"key":"Content-Type","value":"application/x-www-form-urlencoded","description":"","type":"text","enabled":true}]]
Authorization	Bearer Xm8eGrYooF-6p_P8e1K_h6VJ78NwrE9qlsm84CfBEWRYxD50l_OvlhxyPwPy1efbeIYGjGdpu1UIK_Gf4Cbbw
Response in Body (Output)	<pre> { "ClientToken": "c898cf90-3c0d-11e9-bd62-005056bc4630", "pyStatusValue": "200", "ResponseDateTime": "2019-03-04T21:57:03.788Z" } </pre>

Postman Requests Access Token

The following is a JSON (Java Script Object Notation) request to receive the access token.

<pre> { "info": { "_postman_id": "6f1106aa-32ae-415c-8bb8-a7479a2e534c", "name": "auth2", "schema": "https://schema.getpostman.com/json/collection/v2.1.0/collection.json" }, "item": [{ "name": "https://dev-trustmark-oauthcc.cloudhub.io/access_token", "request": { "auth": { "type": "basic", </pre>
--

```

        "basic": [
          {
            "key": "password",
            "value": " 3946F4756E95427b985b460Fe400e47d",
            "type": "string"
          },
          {
            "key": "username",
            "value": " e153ab2f2c5446a488515785dc1157cb",
            "type": "string"
          }
        ]
      },
      "method": "POST",
      "header": [
        {
          "key": "Content-Type",
          "value": "application/x-www-form-urlencoded",
          "type": "text"
        }
      ],
      "body": {
        "mode": "raw",
        "raw": "grant_type=client_credentials"
      },
      "url": {
        "raw": "https://dev-trustmark-oauthcc.cloudhub.io/access_token",
        "protocol": "https",
        "host": [
          "dev-trustmark-oauthcc",
          "cloudhub",
          "io"
        ],
        "path": [
          "access_token"
        ]
      }
    },
    "response": []
  }
]
}

```

Call Invocation API

The following API is used to invoke the call to authorize communication between Simplink and the ben admin system:

```

{
  "info": {
    "_postman_id": "1f4cb547-36c0-4eb5-8c5d-0ea649df56a2",
    "name": "oauth Integration",
    "schema": "https://schema.getpostman.com/json/collection/v2.1.0/collection.json"
  },
  "item": [
    {
      "name": "https://qa-eapi-oauth.us-e1.cloudhub.io/api/benadmin\_integration",
      "request": {
        "auth": {
          "type": "noauth"
        },
        "method": "POST",
        "header": [

```

```

    {
      "key": "Content-Type",
      "name": "Content-Type",
      "value": "application/json",
      "type": "text"
    },
    {
      "warning": "This is a duplicate header and will be overridden by the
Authorization header generated by Postman.",
      "key": "Authorization",
      "value": "Bearer S4zBg7rUIL3rK-
Da64e_n79fXbl1R6XWHMloHTkDquTkEbn5pHiKOD3ltzSGxQL6NCz3OzQEV2LvCWIJtGpzA",
      "type": "text"
    }
  ],
  "body": {
    "mode": "raw",
    "raw": "{ \r\n  \"ClientName\": \"Trex Roofing 2\", \r\n  \"ClientID\": \"1000001223\", \r\n
\"EmployeeSSN\": \"123456789\", \r\n  \"EmployeeID\": \"123456789\", \r\n  \"DateOfHire\": \"20191202\", \r\n
\"FullOrPartTime\": \"FT\", \r\n  \"HoursWorked\": \"40\", \r\n  \"DateOfBirth\": \"19780301\", \r\n  \"Gender\": \"M\", \r\n
\"EmployeeFirstName\": \"Radha\", \r\n  \"EmployeeMiddleName\": \"S\", \r\n  \"EmployeeLastName\": \"Shah\", \r\n
\"Location\": \"LA\", \r\n  \"Department\": \"Insurance\", \r\n  \"Salary\": \"53256\", \r\n  \"DeductionModel\": \"52\", \r\n
\"EmployeeAddress1\": \"21 Waterbury\", \r\n  \"EmployeeAddress2\": \"Near burylane\", \r\n  \"City\": \"Montclair\", \r\n
\"State\": \"IL\", \r\n  \"ZipCode\": \"07043\", \r\n  \"ProductCode\": \"UNIV\", \r\n  \"PhoneNumber\": \"1234567890\", \r\n
\"EmailAddress\": \"radha03202019@trustmarkins.com\", \r\n  \"Dependents\": [ \r\n  { \r\n
\"DependentFirstName\": \"dep032021019_F\", \r\n    \"DependentLastName\": \"dep032021019_L\", \r\n
\"DepBirthDate\": \"20190103\", \r\n    \"Relationship\": \"C\", \r\n    \"DependentGender\": \"M\" \r\n  }, \r\n  { \r\n
\"DependentFirstName\": \"dep032021019_A\", \r\n    \"DependentLastName\": \"dep032021019_B\", \r\n
\"DepBirthDate\": \"20190102\", \r\n    \"Relationship\": \"S\", \r\n    \"DependentGender\": \"M\" \r\n  } \r\n ] \r\n }"
  },
  "url": {
    "raw": "https://qa-eapi-oauth.us-e1.cloudhub.io/api/benadmin_integration",
    "protocol": "https",
    "host": [
      "dev-eapi-oauth",
      "us-e1",
      "cloudhub",
      "io"
    ],
    "path": [
      "api",
      "benadmin_integration"
    ]
  },
  "description": "Oauth"
},
"response": []
}
]
}

```

Part 2: Requesting Enrollment Application Data

After the invocation has completed, the API requests enrollment data from the ben admin system. The Enrollment API is in progress and sends all data in the JSON format. To review the output information from the completed enrollment application, see [Trustmark Enrollment Data](#).

The following is a sample of the enrolment data record that is sent to the ben admin system after the applicant fills out the application in the Simplink widget:

URL	https://qa-eapi-oauth.us-e1.cloudhub.io/api/enrollmentdata
Body	<pre>{ "EmployeeLastName": "Aguilar", "EmployeeFirstName": "Bertrand", "ProductCode": "ACCI", "EmployeeSSN": "208809902", "ClientID": "2000000116" }</pre>
Header	
Content Type	[{"key":"Content-Type","value":"application/x-www-form-urlencoded","description":"","type":"text","enabled":true}]
Authorization	Bearer Xm8eGrYooF-6p_P8e1K_h6VJ78NwrE9qlsm84CfBEWRYxD50l_OvlhxyPwPy1efbelYGjGdpu1UIK_Gf4Cbbw
Response in Body (Output)	<pre>{ "City": "Lake Bluff", "DateOfHire": "20190201", "DeductionMode": "52", "EmailAddress": "personemail@tmk.com", "EmployeeAddress1": "57967 Hanover Junction", "EmployeeAddress2": "roger lane", "EmployeeDateOfBirth": "19771007", "EmployeeFirstName": "Bertrand", "EmployeeID": "21331", "EmployeeLastName": "Aguilar", "EmployeeMiddleName": "V", "EmployeeSSN": "208809902", "Gender": "M", "PhoneNumber": "1111111111", "pxObjClass": "TMK-ENR-Work-Enrollment", "pyCount": "1", "ZipCode": "60044", "pxResults": [{ "ApplicantFirstName": "Bertrand", "ApplicantLastName": "Aguilar", "applicationId": "1566996400", "ApplicationStatus": "Completed", "BenefitAmount": "0.00", "CostPerPayPeriod": "7.38", "CoverageTier": "F", "CoverageTierDesc": "Family", "EffectiveDate": "2019-10-01", "Gender": "M", "ID": "E-15054", "InsuredType": "E", "PlanId": "ACC400000", "PlanName": "Trustmark Accident Insurance Plan 4", "ProductCode": "ACCI", "ProductMarketedName": "Worksite Accident", "SignedDateValue": "2019-08-27", "BeneficiaryInfo": [</pre>

```

"BeneficiaryPercent": "100",
"BeneficiaryType": "Primary",
"BenRelationship": "Estate",
"FullName": "Estate",
"pxObjClass": "TMK-Data-Dependants"
}
],
"Dependents": [
{
"Age": "2",
"ChildFullName": "Luna Tickner",
"DependentDateOfBirth": "2017-08-05",
"DependentFirstName": "Luna",
"DependentGender": "F",
"DependentID": "641",
"DependentLastName": "Tickner",
"FullName": "Luna Tickner",
"IsEligible": "true",
"pxObjClass": "TMK-ENR-Data-DependantData",
"Relationship": "C"
},
{
"Age": "35",
"DependentDateOfBirth": "1983-11-06",
"DependentFirstName": "Laura",
"DependentGender": "F",
"DependentID": "643",
"DependentLastName": "Spouse",
"FullName": "Laura Spouse",
"IsEligible": "true",
"pxObjClass": "TMK-ENR-Data-DependantData",
"Relationship": "S"
},
{
"Age": "33",
"ChildFullName": "Paige tickner",
"DependentDateOfBirth": "1986-04-13",
"DependentFirstName": "Paige",
"DependentGender": "F",
"DependentID": "642",
"DependentLastName": "tickner",
"FullName": "Paige tickner",
"IsEligible": "false",
"pxObjClass": "TMK-ENR-Data-DependantData",
"Relationship": "C"
}
],
"insured": [
{
"insAge": "41",
"InsDateOfBirth": "1977-10-07",
"insFirstName": "Bertrand",
"insId": "1",
"insLastName": "Aguilar",
"insMiddleInitial": "V",
"insRelationToInsured": "E",
"insStatus": "ADDED",
"pxObjClass": "TMK-ENR-Int-XMLMapping-InsuredType"
},
{
"EnrollerName": "Luna Tickner",
"insAge": "2",
"insCtr": "3",

```


	<pre> "InsDateOfBirth": "2017-08-05", "insFirstName": "Luna", "insId": "3", "insLastName": "Tickner", "insRelationToInsured": "C", "insSex": "F", "insStatus": "ADDED" }, { "EnrollerName": "Laura Spouse", "insAge": "35", "insCtr": "2", "InsDateOfBirth": "1983-11-06", "insFirstName": "Laura", "insId": "2", "insLastName": "Spouse", "insRelationToInsured": "S", "insSex": "F", "insStatus": "ADDED" }, { "EnrollerName": "Paige tickner", "insAge": "33", "insCtr": "3", "InsDateOfBirth": "1986-04-13", "insFirstName": "Paige", "insId": "3", "insLastName": "tickner", "insRelationToInsured": "C", "insSex": "F", "insStatus": "ADDED" } }] } } </pre>
--	---

Note: The above is enrolment sample data given in table is for Benefit type “ACCI”. Sample data for other Benefit types are given below

Sample Data for “DISA”

Sample Data for “CRIT”

Sample Data for “UNIV”



GetEnroll DISA Req
uest.json



GetEnroll DISA Res
ponse.json



GetEnroll CRIT Req
uest.json



GetEnroll CRIT Res
ponse.json



GetEnroll UNIV Re
quest.json



GetEnroll UNIV Res
ponse.json

Postman Requests Access Token and Calls EnrollmentData API

The following code shows how the Postman application requests an access token and calls the EnrollmentData API.

```
{
  "info": {
    "_postman_id": "cd9af8e3-00d6-4ee5-b483-f835b7946aee",
    "name": "Enrollment",
    "schema": "https://schema.getpostman.com/json/collection/v2.1.0/collection.json"
  },
  "item": [
    {
      "name": "https://qa-eapi-oauth.us-e1.cloudhub.io/api/enrollmentdata",
      "request": {
        "auth": {
          "type": "noauth"
        },
        "method": "POST",
        "header": [
          {
            "key": "Content-Type",
            "name": "Content-Type",
            "value": "application/json",
            "type": "text"
          },
          {
            "key": "Authorization",
            "value": "Bearer uSe-x6-gLPR5BJZLW2RlxHzBdjj-ek6d0DgmAzpOJH1j4nmv0_hrnGXSu-FY0HAu-6oO6-wqSdLNOau5_fnz5Q",
            "type": "text"
          }
        ],
        "body": {
          "mode": "raw",
          "raw": "{\n  \"EmployeeFirstName\": \"CAROL3\",\n  \"EmployeeLastName\": \"TESTLAST3\",\n  \"ProductCode\": \"ACCI\",\n  \"ClientID\": \"1000001223\",\n  \"EmployeeSSN\": \"652325847\"\n}"
        },
        "url": {
          "raw": "https://qa-eapi-oauth.us-e1.cloudhub.io/api/enrollmentdata",
          "protocol": "https",
          "host": [
            "dev-eapi-oauth",
            "us-e1",
            "cloudhub",
            "io"
          ],
          "path": [
            "api",
            "enrollmentdata"
          ]
        }
      },
      "response": []
    }
  ]
}
```

Part 3: Success, Waive and Complete Enrollment URLs

The Mashup calls the Success and Failure services to indicate whether the enrollment completed or not. Each ben admin system provides the Success and Failure services to Simplink to indicate completion of enrollment.

Success Service

If the Simplink processing is successful, the following URL is passed to the ben admin system:
<https://www.benadmin.com/trustmarkenrollmentsuccess>. This is an example of a URL. You should create your own.

The following graphic shows the success service processing flow:

Ben Admin & Trustmark Enrollment API Integration—Success Scenarios

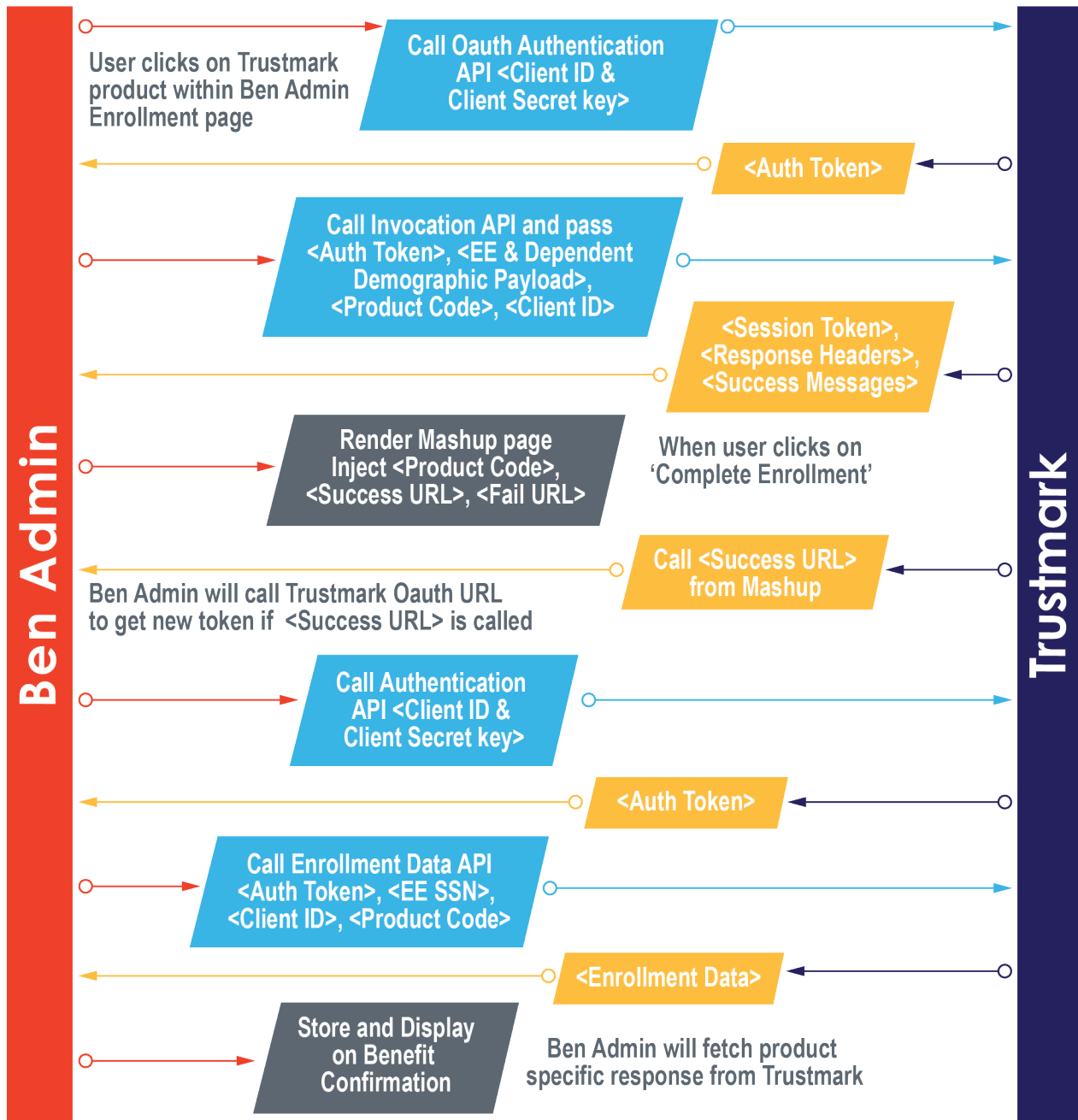


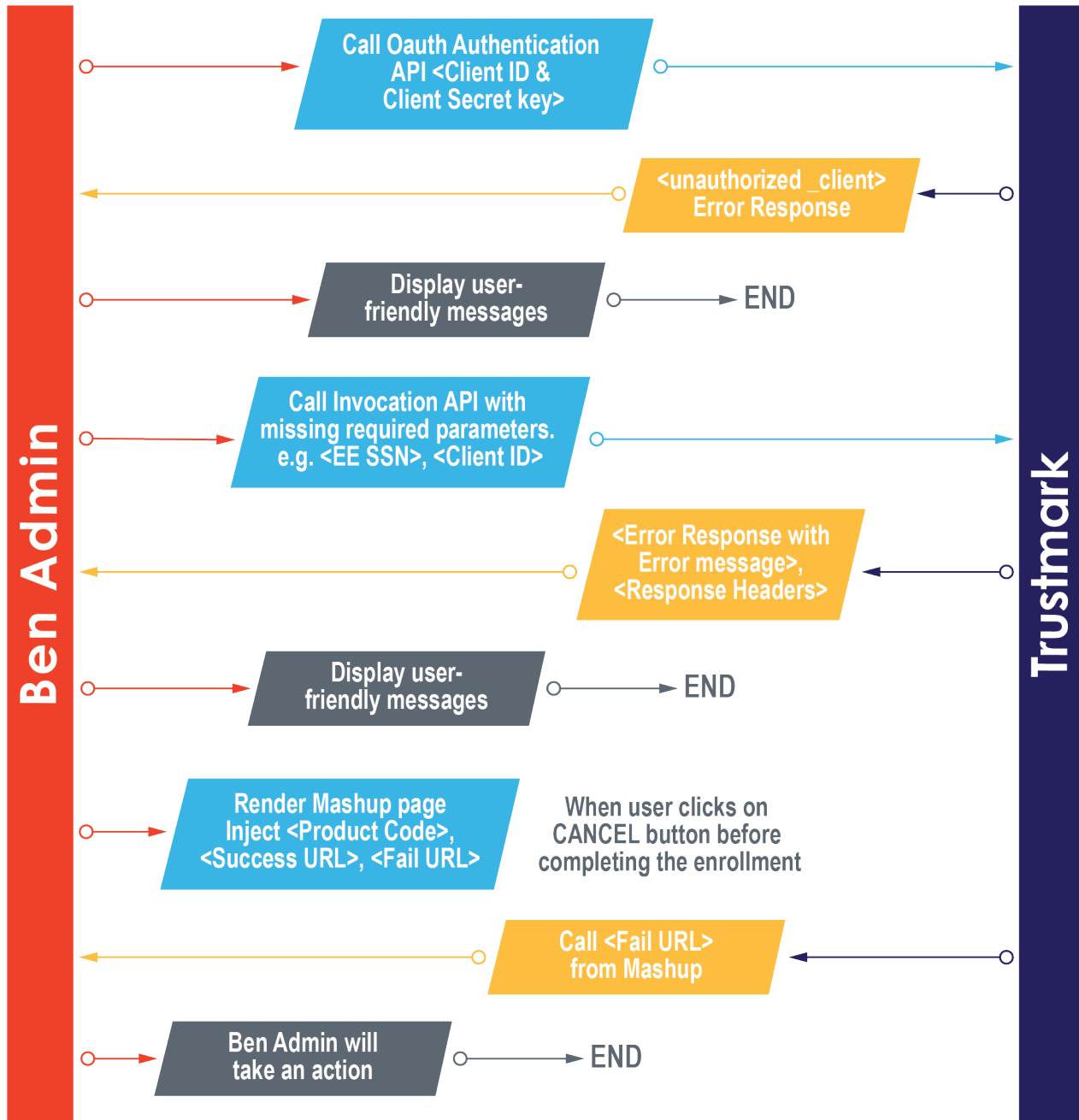
Figure 1: Success Processing Flow

Failure Service

If a user clicks waive coverage, the following URL is sent:

<https://www.benadmin.com/enrollmentwaivedcoverage> This is an example of a URL. You should create your own. The following graphic shows the failure service processing flow:

Ben Admin & Trustmark Enrollment API Integration—Fail Scenarios



Part 4: Integrating Mashup code

The JavaScript code below must be added to the benefit administration system to display the Simplink widget. This JavaScript needs a ClientToken that is output from the API. The client token is changed on each request to the API. The following is an example of the ClientToken: "ClientToken": "fe45a300-3c69-11e9-a39e-12ccadf8ef34".

```

<!-- Global Variable -->
Var Account = ClientToken; // this token is auto generated from API for each request.

<!-- ***** Begin Pega content ***** -->
<script src ='https://trsmrk-tmkapi-stg1.pegacloud.net/prweb/?pyActivity=pzIncludeMashupScripts'></script>
<div id="myDIV" style="width:100%;overflow:auto"
data-pegga-gadgetname='PegaGadget'
data-pegga-action ='openWorkByURL'
data-pegga-action-param-query ='pyActivity=TMK-ENR-Work-Enrollment.CreateAndOpenWork'
data-pegga-isdeferloaded ='false'
data-pegga-applicationname ='ENR'
data-pegga-threadname ='STANDARD'
data-pegga-resizetype ='stretch'
data-pegga-event-onload ="window.scrollTo(0,0)"
data-pegga-event-onclose = "onCloseFunc"
data-pegga-event-oncustom="customCallback"
data-pegga-url ='https://trsmrk-tmkapi-stg1.pegacloud.net/prweb/'
data-pegga-action-param-parameters = {"pzSkinName":"AppSkin_EntireTransparent","UserIdentifier":"
Username","Password":"VCNrMTli","pzUsePreferenceSkin":"always","ClientToken":Account};
PegaE_onConfirm="onConfirmFunc">
</div>
<!-- ***** End Pega content ***** -->

```

Note: This JavaScript will not work without the userid (enrolment user) and password provided by Trustmark. The provided password and userid do no expire.

Apart from mashup javascript code, Benadmin will include below JavaScript functions to be called by Mashup code per scenario as below

```

<script type="text/javascript">

<!-- Function will call when applicant wants to enroll in additional plans for UNIV & DISA product. -->

function onConfirmFunc() {
    window.open('https://www.benadmin.com/servicetomovetonextproductorbenefitssummary', "_top");
}

<!-- Function will call on the complete enrollment button for each product. -->

function customCallback() {
    window.open('https://www.benadmin.com/trustmarkenrollmentsuccess', "_top");
}

```

```
<!-- Function will call when user clicks on the Waive Coverage button -->
```

```
function onCloseFunc() {
    window.open("https://www.benadmin.com/enrollmentwaivedcoverage", "_top");
}
</script>
```

Test Scenarios

The following test scenarios were created to help clients assess installation and functioning of Simplink within the ben admin system.

Scenario	Description	Expected Result
1	Verify the eligibility rule when department and location are blank and employee is part time (PT) in the invocation parameter sent by the ben admin system.	Available plan logic should be displayed on the widget application based on the invocation parameter sent by the ben admin system. Note: Job class should be calculated based on the Hours Worked by week, but the widget also expects a PT or an FT parameter as part of invocation.
2	Verify the eligibility rule when department and location are blank and employee is full time (FT) in the invocation parameter sent by the ben admin system.	Available plan logic should be displayed on the widget application based on the Invocation parameter sent by the ben admin system. Note: Job class should be calculated based on the Hours Worked by week, but the widget also expects a PT or an FT parameter as part of invocation.
3	Verify the underwriting question and rate rule when department and location are available and employee is PT in the invocation parameter sent by the ben admin system.	Underwriting question and rate should be displayed in the widget based on the invocation parameter sent by the ben admin system.
4	Verify the underwriting questions when department and location are available and employee is FT in the invocation parameter sent by the ben admin system.	Underwriting question and rate should be displayed in the widget based on the invocation parameter sent by the ben admin system.
5	Verify the underwriting question when department and location are available and employee full time and part time details are not available in the invocation parameter sent by the ben admin system.	Underwriting question and rate should be calculated and displayed in the widget based on the invocation parameter sent by the ben admin system.
6	Verify the rate when department and location are available and employee full time and part time details are not available in the invocation parameter sent by the ben admin system.	Rate should be calculated and displayed in the widget based on the invocation parameter sent by the ben admin system.
7	Verify the eligibility rule when department and location are available and employee full time and part time details are not available in the invocation parameter sent by the ben admin system.	Eligibility rule should be calculated and displayed in the widget based on the invocation parameter sent by the ben admin system.
8	Verify the rate rule when location and employee full time and part time details are not available in the invocation parameter sent by the ben admin system.	Rate should be calculated and displayed in the widget based on the invocation parameter sent by the ben admin system.

Trustmark Product Plan Details

The table below shows the existing Trustmark product plan information.

Product Name	Product Code	Plan Name	Benefit Period	Notes/Information
Accident	ACCI	Plan 1		
Accident	ACCI	Plan 2		
Accident	ACCI	Plan 3		
Accident	ACCI	Plan 4		
Accident	ACCI	Plan 5		
Accident	ACCI	Plan 6		
Accident	ACCI	Plan 7		FL Only
Accident	ACCI	Plan 8		CO
Accident	ACCI	Plan 9		CO, NY
Disability	DISA	DI902	Short-Term Benefit Period (3 months)	Starting July 1, 2019 only available for re-enrollments of existing Di902 clients.
Disability	DISA	DI902	Long-Term Benefit Period (24 months)	Starting July 1, 2019 only available for re-enrollments of existing Di902 clients.
Disability	DISA	DI-Paycheck Protect	Short-Term Benefit Period (3 months)	Starting July 1st only DI plan being offered for new cases.
Disability	DISA	DI-Paycheck Protect	Long-Term Benefit Period (24 months)	Starting July 1st only DI plan being offered for new cases.
Critical Illness	CRIT	Cancer Only		
Critical Illness	CRIT	Critical Illness Only		
Critical Illness	CRIT	Combo (Cancer /Critical Illness)		Bulk of our CI business
Critical Illness	CRIT	CriticalHealthEvents With Cancer		
Critical Illness	CRIT	CriticalHealthEvents Without Cancer		
Universal Life	UNIV	UniversalLifeEvents		Ages 18 to 64 (Employee and Spouse)
Universal Life	UNIV	Standard Universal Life		Ages 18 to 80 (Employee); Ages 18 to 70 (Spouse)
Universal Life	UNIV	Child UL		Dependent Children/Grandchildren
Hospital Indemnity Plan	HII	HIP		Available 1.1.2020

Trustmark Enrollment Data

During the enrollment process, invocation data and application data are captured in the Trustmark backend system and will be available to the ben admin system at the end of the enrollment process. The following tables present the enrollment data, in record format, that can be captured and transferred to the ben admin system:

Employee Record

The following information is captured in the Employee Record:

Field Name	Data Type	Example
Employee First Name	Text	John
Employee Middle Initial	Text	M
Employee Last Name	Text	Doe
Employee SSN	Text	124-55-2302
Employee ID	Text	01345
Address Line 1	Text	123 Home Street
Address Line 2	Text	PO BOX 1
City	Text	Mequon
State	Text	Wisconsin
ZIP	Text	53092
Phone Number	Numeric	414.915.2502
Email Address	Text	JD@Home.com
Date of Birth	Date	04/30/1970
Date of hire	Date	01/01/2001
Gender	Text	M
Deduction Frequency	Numeric	26

Product Record

The following information is captured in the Product Record:

Field Name	Data Type	Example
Applicant Name	Text	Jane
Applicant Employee Last Name	Text	Doe
Application ID	Text	2321212
Gender	Text	M
Relationship	Text	S (spouse), C (child), G (grandchild)

Field Name	Data Type	Example
Product Name	Text	Universal Life
Product Code	Text	UNIV
Plan Name	Text	Trustmark Standard Universal Life
Plan Code	Text	TSUL20500
Benefit Period	Text	NA
Benefit	Numeric	50,000
Coverage Tier Name	Text	Employee Only
Coverage Tier Code	Text	E, ES, EC, F, C, G
Modal Deduction Premium	Numeric	21.67
Policy Effective date	Date	01/01/2019
Optional Riders	Text	CTR and EZV Only
Signature Date	Date	12/30/2018
Enrollment Status	Text	Completed

Dependent Record

If the employee has dependents, the following information is captured in the Dependent Record:

Field Name	Data Type	Example
First Name	Text	Julie
Last Name	Text	Doe
Relationship	Text	Child
Date of Birth	Date	04/30/1970
Gender	Text	M

Beneficiary Record

The following information is captured in the Beneficiary Record:

Field Name	Data Type	Example
Primary Beneficiary Name	Text	Trust
Primary Beneficiary Percentage	Numeric	100%
Contingent Beneficiary Name	Text	All Living Children
Contingent Beneficiary percentage	Numeric	100%

API Error Response

API Error Response Messages

The following table lists the Simplink Widget API error messages. These are standard messages that we encourage you to alter to fit the needs of your ben admin system.

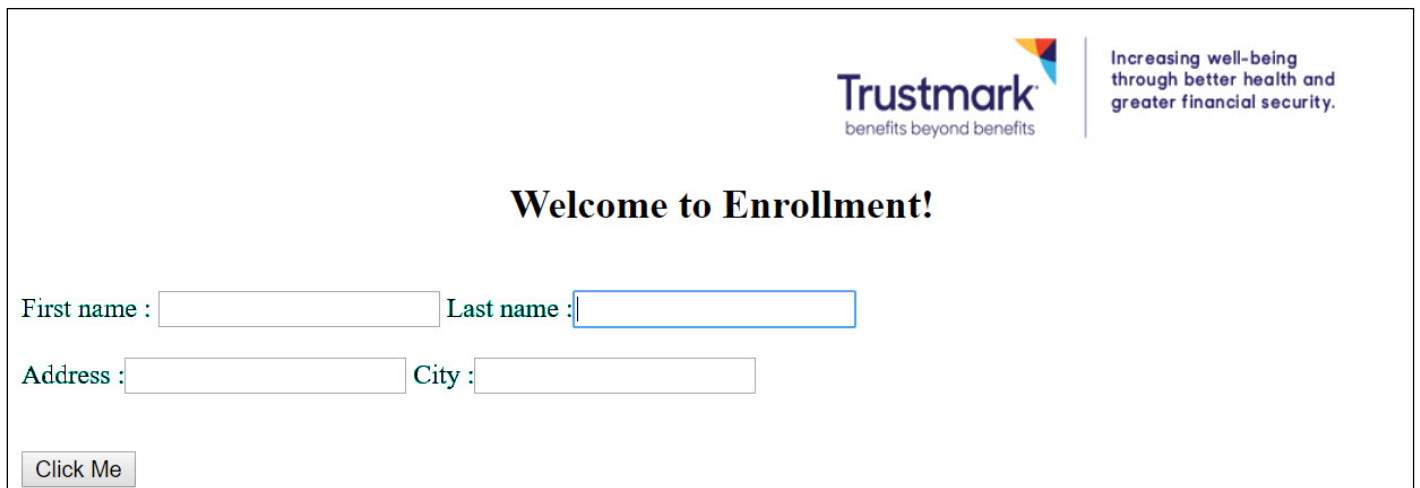
Number	Error Type	JSON Error Message
1	Request Without Message Body	Error_Code: ME102, Error Message: The input request has no message body. Please send appropriate request.
2	Bad Request/Schema Validation Exception	Error_Code: ME101, Error Message: The request has incorrect/invalid request parameters. Please send valid request.
3	Not Acceptable Exception	Error Code: AE104 Error_Message: The input request is not acceptable.
4	Unsupported Media Type	Error Code: AE103 Error Message: The input request has unsupported media type.
5	Method Not Allowed	Error Code: AE102 Error Message: Remote Method is not allowed for the input request.
6	Resource Not Found	Error Code: AE101 Error Message: The requested resource is not found.
7	System Not Available	Error Code: ME103, Error Message: Requested system is unavailable. Please try after some time.

Note: Your IT team may wish to make these sample messages more user-friendly and provide error capture functionality for resolution by your support team.

Skinnability

The Simplink API automatically provides skinnability to the widget after the mashup portion of the processing occurs. The API uses the PEGA AppSkin_EntireTransparent parameter so the Widget automatically takes on the background color of the hosting ben admin system. For example, if your ben admin system has a green background, the Simplink widget will take on the same green background when it is embedded in the ben admin system during mashup processing.

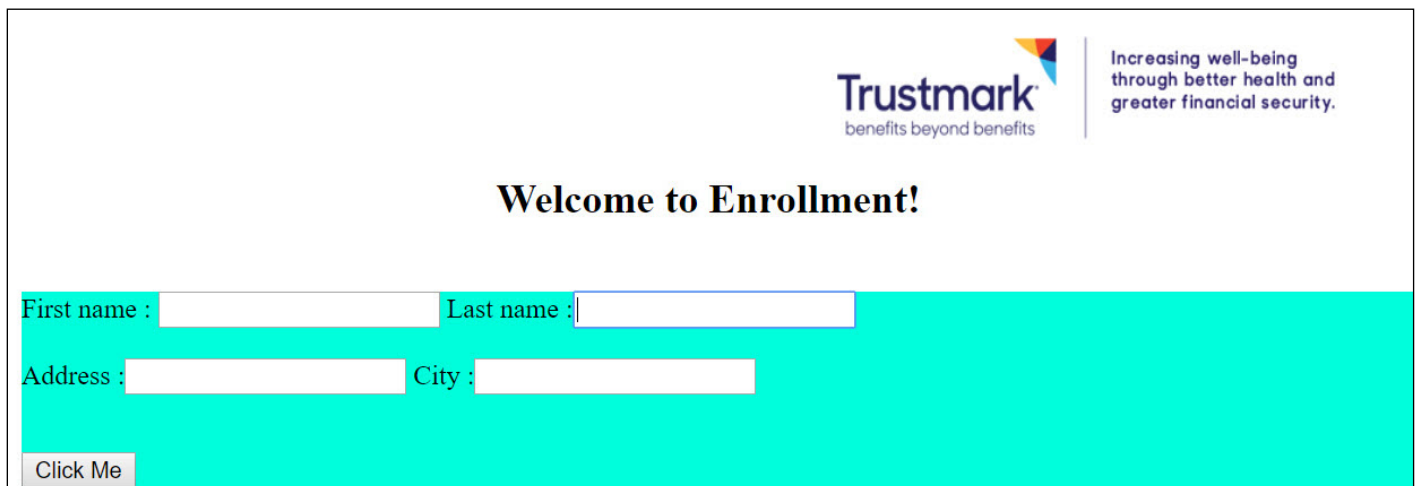
The following is an example of the Simplink screen as it looks before it is embedded in the ben admin system:



The image shows a web form titled "Welcome to Enrollment!". In the top right corner, there is the Trustmark logo and the tagline "benefits beyond benefits", along with a vertical line and the text "Increasing well-being through better health and greater financial security." The form contains four input fields: "First name :", "Last name :", "Address :", and "City :". A "Click Me" button is located at the bottom left of the form area.

Figure 2: Generic Simplink Screen

The following is an example of the Simplink screen as it looks after it is embedded in the Ben App system during mashup processing:



The image shows the same "Welcome to Enrollment!" form as in Figure 2, but it is now skinned. The entire background of the form area is a solid cyan color. The form elements, including the input fields and the "Click Me" button, are visible on top of this background. The Trustmark logo and tagline are also present in the top right corner.

Figure 3: Skinned Simplink Screen

Sample Client Data

The following is an example of data that can come from a client's ben admin system:

Business Name	Desc.	Req.?	EE 1				EE2	EE3
Client Identification & Secure Token								
Client ID	Client identification for this specific enrollment.	Yes	Test Case 1 - 1000001223	Test Case 1 - 1000001223	Test Case 1 - 1000001223	Test Case 1 - 1000001223	Test Case 1 - 1000001223	Test Case 1 - 1000001223
Employee Details								
Employee SSN	SSN or Emp. ID must be provided at invocation	Yes	123405671	123405672	123405673	123405674	123405675	123405676
Employee ID	SSN is required before enrollment. SSN or Emp. ID must be provided at invocation.	No	ID238	ID238	ID238	ID238	ID240	ID242
Employee First Name	First Name	Yes	Courtney	Courtney	Courtney	Courtney	Jennifer	Anthony
Employee Middle Initial	Middle Initial	No	C	C	C	C	L	Michael
Employee Last Name	Last Name	Yes	Samson	Samson	Samson	Samson	Young	Samson
Date of Birth	Birth Date	Yes	4/16/1981	4/16/1981	4/16/1981	4/16/1981	8/13/1977	12/16/1984
Gender	Gender of employee	Yes	F	F	F	F	F	M
Date of Hire	Employee Hire Date	Yes	10/1/2014	10/1/2014	10/1/2014	10/1/2014	3/3/2018	5/1/2009
Employee Address								
Address	Complete address with zip code	Yes	2031 VanHorn Ct Chicago, IL, 60657	2031 VanHorn Ct Chicago, IL, 60657	2031 VanHorn Ct Chicago, IL, 60657	2031 VanHorn Ct Chicago, IL, 60657	13 Westridge Rd Madison, WI 50823	1924 W Oakdale Ave Chicago, IL 60657
Location	Nominal location the employee is associated with (could be a physical place/city/town, but could be used to describe sub-organizations or classes of work e.g., "bus drivers"). Used for eligibility.	Yes, if location is set up in ben admin.	IL	IL	IL	IL	IL	IL
State	Current resident state	Yes	IL	IL	IL	IL	WI	IL
Contact Details								
Phone Number	Primary Phone Number	Yes	404-909-5359	404-909-5359	404-909-5359	404-909-5359	312-535-7349	404-909-5356
Primary Email	Primary Email Address	Yes	csamson@trustmarkins.com	csamson@rustmarkins.com	csamson@rustmarkins.com	csamson@rustmarkins.com	jlyoung@trustmarkins.com	amsamson@trustmarkins.com
Job Details								
Department	Used for billing purposes	Yes if department is set up in ben admin. Needs to be passed.	EPMO	EPMO	EPMO	EPMO	IT	Ops
Full Time or Part Time Employee	Indicator of full time/part time	Yes	FT	FT	FT	FT	PT	FT
Salary	Yes for DI	Yes	100000	100000	100000	100000	50000	110000

Business Name	Desc.	Req.?	EE 1				EE2	EE3
Hours Worked by week	Integer value of hours worked	No	37	37	37	37	25	40
Deduction Mode	Number of deductions to be made annually to cover the cost of premiums	Yes	24	24	24	24	24	24
Product Details								
Product Name	Trustmark Product Name selected to enrol	Yes	Accident	Life	Critical Illness	Disability	Life	Disability
Dependent Summary								
Dependent First Name	Yes - for each dependent (spouse, child, grandchild)	No	Tek	Tek	Tek	Tek	Eric	Maggie
Dependent Last Name	Yes - for each dependent (spouse, child, grandchild)	No	Samson	Samson	Samson	Samson	Young	Samson
Dependent Date of Birth	Yes - for each dependent (spouse, child, grandchild)	No	11/17/2015	11/17/2015	11/17/2015	11/17/2015	12/15/1974	4/1/1980
Relationship	Yes - for each dependent (spouse, child, grandchild)	No	Child	Child	Child	Child	Spouse	Spouse
Dependent Gender	Yes - for each dependent (spouse, child, grandchild)	No	M	M	M	M	M	F
Dependent First Name							Mason	Quin
Dependent Last Name							Young	Samson
Dependent Date of Birth							36529	40301
Relationship							Child	Child
Dependent Gender							M	F
Dependent First Name							Ryan	Harper
Dependent Last Name							Young	Samson
Dependent Date of Birth							38298	40301
Relationship							Child	Child
Dependent Gender							M	F
Dependent First Name							Gannon	
Dependent Last Name							Young	
Dependent Date of Birth							39637	
Relationship							Child	
Dependent Gender							M	

Index

""_postman_id.....	12	Gender.....	26
"POST".....	13	Last Name.....	26
A		Relationship.....	26
ACCI.....	24	DISA.....	24
AE101.....	27	E	
AE102.....	27	EE1.....	29
AE103.....	27	EE2.....	29
AE104.....	27	EE3.....	29
API		Embedded Widget	
Call Access Token.....	11	Example of.....	28
Call Invocation.....	13	Employee Record.....	25
EnrollmentData.....	18	Address Line 1.....	25
Error Messages.....	27	Address Line 2.....	25
AE101.....	27	City.....	25
AE102.....	27	Date of Birth.....	25
AE103.....	27	Date of Hire.....	25
AE104.....	27	Deduction Frequency.....	25
ME101.....	27	Email Address.....	25
ME102.....	27	Employee First Name.....	25
ME103.....	27	Employee ID.....	25
PEGA AppSkin_EntireTransparent parameter.....	28	Employee Last Name.....	25
Processing Flow.....	5	Employee Middle Initial.....	25
Apple Safari.....	6	Employee Phone Number.....	25
Authorization.....	12, 15	Employee SSN.....	25
Bearer.....	15	Gender.....	25
B		State.....	25
Background Color.....	28	ZIP.....	25
Beneficiary Record.....	26	Enrollment Data.....	25
Contingent Beneficiary Name.....	26	Requesting.....	15
Contingent Beneficiary Percentage.....	26	Enrollment Data Record.....	15
Primary Beneficiary Name.....	26	EnrollmentData.....	18
Primary Beneficiary Percentage.....	26	F	
Body.....	15	Failure Service.....	20
C		G	
Call Access Token.....	11	Google Chrome.....	6
Call Invocation.....	13	H	
Client Data.....	29	Hire	
ClientToken.....	22	Date of.....	29
Content Type.....	15	https	
CRIT.....	24	//dev-eapi-oauth.us-e1.cloudhub.io/api/enrollmentdata	
D		15, 18
Date of Hire.....	29	I	
Dependent Record.....	26	Integration meeting.....	6
Date of Birth.....	26	Internet Explorer.....	6
First Name.....	26	Invocation.....	11

invocation data structure	11	Plan Code	26
J		Plan Name	26
JavaScript.....	22	Policy Effective Date	26
Note regarding	22	Product Code.....	26
JSON	12	Product Name	26
L		Relationship	26
Legal Information	2	Signature Date	26
Legal InformationCopyright.....	2	R	
M		Response in Body.....	12, 15
Mashup Code	22	S	
ME101	27	Sample Client Data.....	29
ME102	27	Schema.....	18
ME103	27	Simplink	
Microsoft Edge	6	Prerequisites.....	6
Mozilla Firefox	6	Simplink Widget	
O		Processing Flow	4
OAuth	11	skinnability	28
P		Success Service	19
PEGA AppSkin_EntireTransparent.....	28	Supported Browsers	
Postman.....	12, 18	Apple Safari	6
Prerequisites.....	6	Google Chrome.....	6
Product Code		Internet Explorer	6
ACCI.....	24	List of.....	6
CRIT	24	Microsoft Edge	6
DISA.....	24	Mozilla Firefox.....	6
UNIV.....	24	T	
Product Plan Details	24	Trustmark Insurance Company	
Product Record.....	25	Copyright	2
Applicant Employee Last Name	25	Trustmark Product Plan	
Applicant Name	25	Details.....	24
Application ID	25	trustmarkenrollmentfail	20
Benefit.....	26	trustmarkenrollmentsuccess	19
Benefit Period	26	U	
Coverage Tier Code.....	26	UNIV.....	24
Coverage Tier Name.....	26	W	
Enrollment Status	26	widget screen	
Gender	26	plain	28
Model Deduction Premium.....	26	skinned	28
Optional Riders	26	transparent.....	28
		Z	
		ZIP	25