

# Phone Number Validation

Technical Overview  
Professional Edition



Document Version 1.2

## Revision History

Revision Detail	Author	Revision Date	Version
Initial Draft	Bill Dodson	10/12/2020	1.0
Use Phone Validation Related List and Phone Validation List View for the Lightning Component names	Bill Dodson	10/19/2020	1.1
Add “Professional Edition” text to the document	Bill Dodson	11/13/2021	1.2

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## 1 Document Purpose

This document contains a technical overview for the **Professional Edition** Phone Number Validation product by Tigerface Systems, LLC.

## 2 Product Overview

Phone Number Validation is an AppExchange product for Salesforce Lightning which allows users to validate phone numbers on Account, Contact, Lead, and other Standard or Custom Object records. The solution utilizes Application Programming Interfaces (APIs) published by [realphonevalidation.com](http://realphonevalidation.com). *A paid account from [realphonevalidation.com](http://realphonevalidation.com) is required for the use of these API services.*

### 2.1 Product Use Cases

After a subscriber installs the Phone Number Validation managed package, a system administrator will perform various steps to configure the product as depicted in the following diagram. Once configured, application users will be able to view up-to-date phone number validation data for Account, Contact, Lead, and Custom Object records.

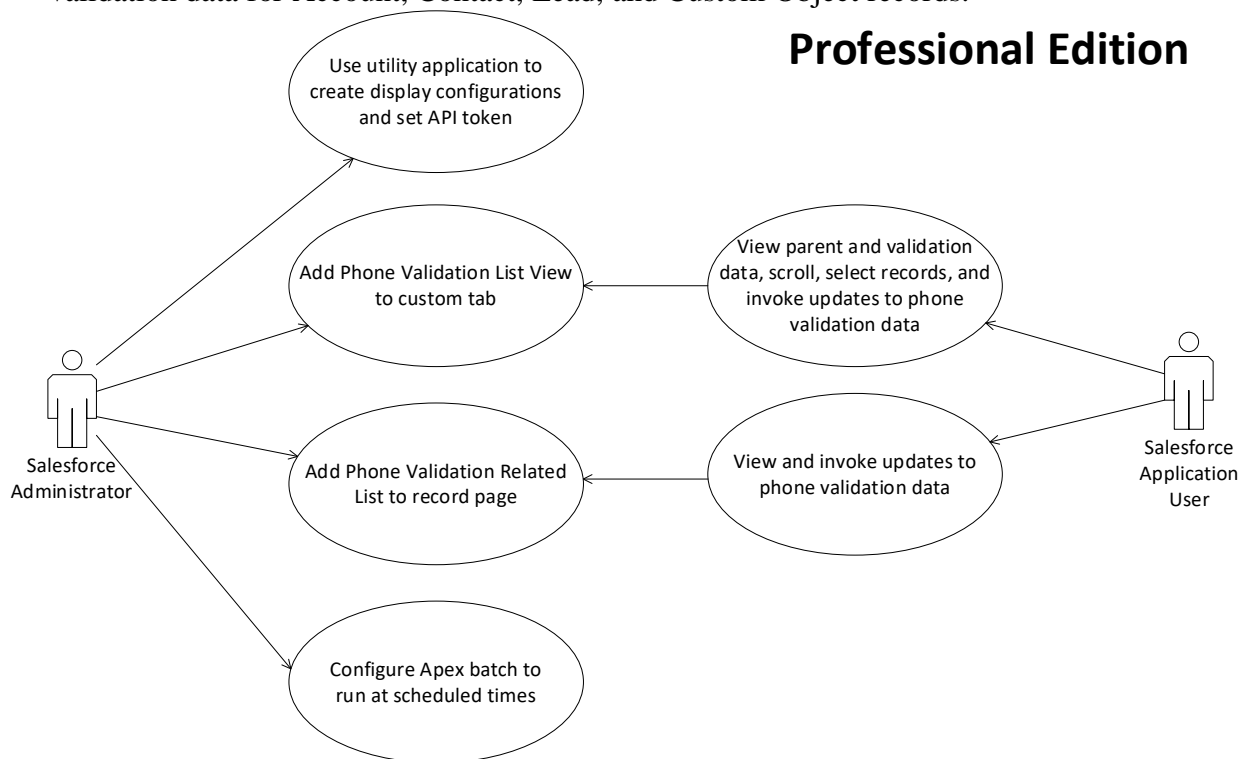


Figure 1: Phone Validation Use Cases

### 3 Setup Architecture

The following diagram presents the architecture for configuring the Phone Number Validation product:

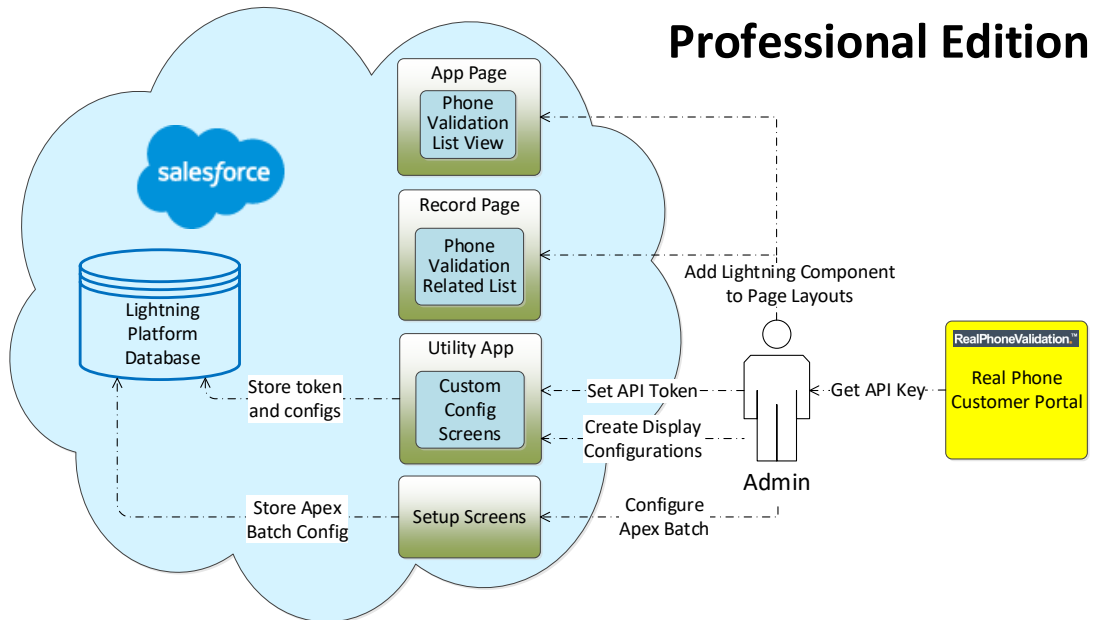


Figure 2: Setup Architecture

The product’s managed package provides a Utility App with a Lightning Web Component (LWC) user interface. This interface will provide Custom Config Screens which allow the Administrator to:

- Enter the API Token which is obtained from the Real Phone Customer Portal web site. This key grants Salesforce access to the realphonevalidation.com API services.
- Create Display Configurations: select the validation API to be invoked; select the standard or custom object’s phone number fields; select the validation fields to be displayed; select if the configuration is for a Related List or List View; and configure a filter to reduce the number of records displayed in a List View.

Once the configurations have been created, the Administrator adds a Phone Validation Related List or a Phone Validation List View Lightning Component to a Lightning page. These Lightning Components present the phone number validation data to the application user.

The system administrator can also schedule an Apex Batch Job to run at specified times to retrieve up-to-date phone validation data for each display configuration.

## 4 Run Time Architecture

The following diagram depicts the run time architecture of the Phone Validation product.

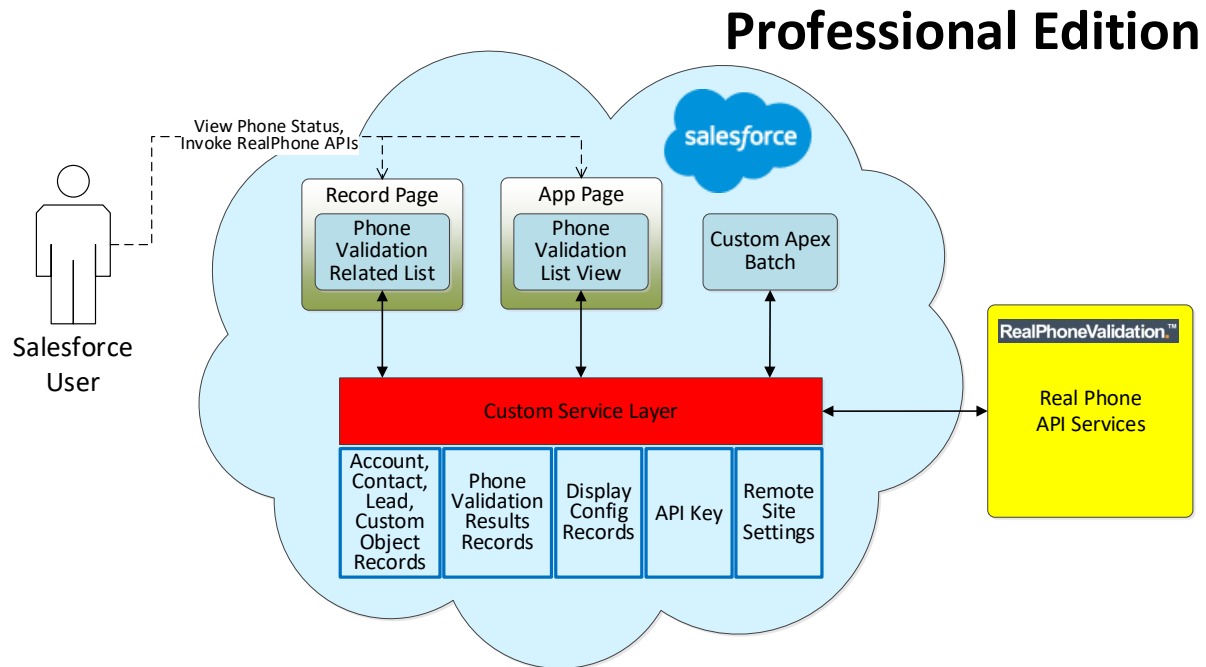


Figure 3: Run Time Architecture

### Component Descriptions

- **Phone Validation Related List** – this is a Lightning Web Component which displays a list of phone numbers and their associated validation fields. A Validation button can be clicked by the user to retrieve up-to-date phone number validation data on demand.
- **Phone Validation List View** - this is a Lightning Web Component which is used to display parent object fields along with phone validation fields in a list view format. A Validation button can be clicked by the user to retrieve up-to-date phone number validation data on demand.
- **Custom Apex Batch** – a batch job that runs periodically to retrieve up-to-date phone validation data for each Display Configuration definition. A system administrator will use standard Salesforce Setup pages to configure when and how often this batch job will be executed.



- **Custom Service Layer** – (in red) provides services for the Lightning Web Component to invoke.
- **Real Phone API Services** – these are paid API services offered by [realphonevalidation.com](http://realphonevalidation.com). The service layer will invoke these to retrieve validation data for phone numbers. A Remote Site Setting is required, along with a valid API Token issued by [realphonevalidation.com](http://realphonevalidation.com).

## 5 About Tigerface Systems, LLC

Tigerface Systems is a custom software development company based in the suburbs of Maryland, USA. We specialize in custom Salesforce solutions that are marketed and sold on the Salesforce AppExchange. We are a private, family-owned and operated company. We do all work in-house to ensure the utmost highest quality is engineered from the beginning and maintained throughout our product's lifecycle.

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