**Address Validation in Syspro Requirements**

Updated January 5, 2022

**Summary**

With business growth and focus on retail store customers and drop shipping, there is a need for accurate address validation for customers and sales orders in the Syspro client. In addition to validating addresses, it is also necessary to know if an address is a commercial address or residential address. It has been determined that SmartyStreets’ US Address Verification API will is the best option for our business needs. When validating, user will be prompted if invalid to accept suggested address, return to maintenance, or continue anyway.

**Affected Syspro Programs**

Sales Order Maintenance and Customer Maintenance (both bill to and ship to addresses).

**Address Validation**

Address format being adopted is below. Only validating US addresses as they account for 99%+ of transactions and international addresses require utilizing a separate API. Validation should clean up any formatting issues such as correcting abbreviations.

Address Line 1 – Street Address

Address Line 2 – Apartment / Suite / Additional information

Address Line 3 – City

Address Line 3 Loc – Not Utilized

Address Line 4 – State

Address Line 5 – Country

Postal Code – 5 digit Zip code

**Address Type**

In addition to the physical address, there are custom form fields for Address Type on both the customer and sales order. Address Type is defined as Commercial or Residential. On the customer master, Address Type only applies to the ship to address. Validation of Commercial vs Residential is not 100% accurate, so user should be able to override the suggested Address Type when different.

**User Interaction**

If address is valid and address type matches, then no prompt to user and program exits normally. If address is invalid or address type does not match, then prompt the user to Accept Changes if a proposed address or address type is available, Cancel to return to maintenance and correct address, or Ignore to leave address as is. If they select Ignore, then user should be prompted for a reason. This could be free format or a drop down list of choices such as “Confirmed with Customer”, “International”, “Pending Customer Input” and information should be logged with corresponding date/time, customer or order number, user, and reason code. Should also maintain a list of customers or order numbers that have not been validated, so those can be revalidated when maintained again (also for reporting). If customer or order is subsequently validated, then it should be removed from the list.

**Triggering Validation**

To both ensure a speedy transaction and to keep API costs at a minimum, addresses should only be validated on new orders/customers, when an address is changed, or when that customer or order is in the “unvalidated” list. This could be done with a custom field that is updated when validated or when an address is changed, or using a combination of whether an address change was made during the session or whether it is a new customer or sales order. A new customer would be one that is created in that session. A new sales order would be either one created in that session or one being released from Forward Status (Imported orders are imported at Forward status and then released). We are open to suggestions here, but it would be ideal to know if an address has been validated already and not to revalidate if the address did not change. This could be a phase 2 and we just validate every time an order is ended or customer is saved and if there is a performance or significant cost associated, we could revisit then.