# API – VAN business process flow

* Full list of our API calls with usage examples and notes: [API Calls · LorenData/ECGrid-API Wiki · GitHub](https://github.com/LorenData/ECGrid-API/wiki/API-Calls)
* URL to try the API calls to see result sets against your network and/or mailbox: <https://os.ecgrid.io/v4.1/prod/>

**Outbound from your network** – Upload Document

* ParcelUploadExA - Post an EDI document to ECGrid. It will return the parcelID of the document successfully uploaded. This parcel ID can be used to retrieve additional information.
* InterchangeInfo – Return the metadata about a specific interchange – including the document status.
* InterchangeManifest – returns the audit information which shows the step/process it went through on ECGrid.

**Inbound to your network** – Download Document

*Batch Method*

* Get list of parcels in network
  + ParcelInBoxEx – use SessionID (API Key of network Admin), NetworkID, and -1 (ALL) for rest to capture all parcels for all mailboxes.
* Loop through ParcelIDInfo to get each document and get ParcelID value.
* Get document in base64String: Call ParcelDownloadA using SessionID and the ParcelID.
* Call ParcelDownloadConfirm to remove the file from the pending download list.

*Callback – Webhook*

* CallBackAddEx – Once you create this callback request, it will send a response to the URL provided with the parcelID of the document that arrived in the inbox.
* Get document in base64String: Call ParcelDownloadA using SessionID and the ParcelID.
* Call ParcelDownloadConfirm to remove the file from the pending download list.

**Look up Transactions**

* InterchangeInBoxEx – able to search by date range and interchange control number. The date needs to be in YYYY-MM-DDTHH:mm:ss in UTC format. The times can take an offset as well: Ex – 2023-02-01T00:00:00-05:00 where the UTC offset is -05:00. The InterchangeControlID can be an empty string and ECGridIDTo, ECGridIDFrom and Mailbox can have a -1 to get “ALL”.
* InterchangeOutBoxEx – able to search by date range and interchange control number. The date needs to be in YYYY-MM-DDTHH:mm:ss in UTC format. The times can take an offset as well: Ex – 2023-02-01T00:00:00-05:00 where the UTC offset is -05:00. The InterchangeControlID can be an empty string and ECGridIDTo, ECGridIDFrom and Mailbox can have a -1 to get “ALL”.
* To view the actual document, you can call the ParcelDownload function.

**Document Error Checks**

* CallBackAddEx
  + Set SystemObject (network, mailbox, parcel)
  + Set ObjectStatus – Invoke Callback for each parcel status that would need investigation. So, if parcel reaches error status, Callback will hit specified URL to act on a specific parcel. For outbound errors, a Callback would need to be set for the outbox. For inbound errors, a Callback would need to be set for the inbox.
* Call InterchangeManifest for specific parcel to get audit information for the errors. This will show each step/process through the ECGrid network.

Snippet from return set:   
<ManifestInfo>

        <ManifestDate>2022-11-09T15:03:33.09</ManifestDate>

        <NetworkID>47</NetworkID>

        <NetworkName>Loren Data Corp. - ECGrid Testing</NetworkName>

        <Type>ECGridOS</Type>

        <ParcelID>1416918926</ParcelID>

        <InterchangeID>0</InterchangeID>

        <StatusCode>M2000</StatusCode>

        <StatusMessage>NETWORK-IN: Parcel Ready for Grid Processing</StatusMessage>

        <StatusColor>blue</StatusColor>

    </ManifestInfo>

**Administration**

* TPAddEx - Add new IDs to a mailbox. RoutingGroup is mandatory and usually ProductionA
* MailboxAddEx – Add new mailbox to network. User needs to exist before creating mailbox
* To setup an interconnect/Trading partnership
  + Call TPSearch – this will search the ECGrid network for the trading partner IDs to see if they are currently set up on our network. Make sure -1 is set for NetworkID and MailboxID to search the entire ECGrid Network, not just a specific network node or mailbox. This will need to be called for each set of qualifiers and IDs you want to setup the partnership.
  + Capture the ECGridIDs (internal UUIDs for the qualifier and IDs)
  + Call InterconnectAdd with the ECGridIDs captured with the TPSearch function
* Resend Interchange – You need the ECGrid internal Interchange ID to resend an interchange.
  + InterchangeInboxEx or InterchangeOutboxEx– Search for the interchange you want using one of these calls and the ISA control number.
  + Find the InterchangeID element value.
  + Call InterchangeResend with the InterchangeID value.

**Find Trading Partner IDs on ECGrid Network**

* TPFindEX – Search the ECGrid Network by description. -1 on NetworkID and MailboxID will allow a search across all our networks and mailboxes. % at the beginning/end of the description will wildcard the entry.
  + When using GET, you need to have %25 in front of the ID so it is accepted in the HTTP request. Ex: %25DEMO%
  + If using POST with the parameters in the body, no need for the %25 in front. Ex: %DEMO%
* TPSearchEx – Search the ECGrid Network by qualifier and ID. % at the beginning/end of the qualifier and/or ID will wildcard the entry.