Roll-On Roll-Off Terminal Operations
(RO-RO-TOS)
Ro-Ro-TOS shall be one-stop solution to streamline processes related to Roll-On and Roll-Off Operations. This addresses Import, Export, Yard Planning, Yard Operations, Vessel Planning, Vessel Operations and Billing life cycles of a Ro/Ro Terminal. RO-RO-TOS is a web based internet application, which acts as key platform for Ro/Ro Operators to manage operational and billing activities.

RO-RO-TOS application is developed and supported by V&V Comptech Systems. RO-RO-TOS facilitates flexible operation process both for EXIM and Domestic vehicle movements through Rail. This application is designed on 3-Tier architecture using ASP.Net, Java Servlets, IIS 6.0, Oracle 10g Apps Server, and it runs on Windows 200X Platforms.

**Salient Features**

- Latest technology
- User friendly
- Integrated
- Graphic User Interface
- Secured
- Easy to install
- Modular
- Flexibility
- Real Time Operation

**System Requirements**

- Quad Core Xeon Processor Server (Windows 200X Server)
- Pentium PC Client (Windows 200X / XP Professional)
- Oracle 10g RDBMS
- ASP.Net
- Radio Data Terminals (Optional)
- Bar Code Readers (Optional)

(We recommend the server sizing only on studying the business needs in detail)
Export Operation

- **Vehicle Type Definition**
  System facilitates to define different type of vehicle with manufacturer details, vehicle dimensions, weight, engine details and different colors.

- **Pre Advice / Documents Updation for Export**
  System provides to update Vehicle Details like Vehicle Identification Number, Chassis Number, manufacturing Details, Port of destination (POD), ORIGIN, Final Port Destination (FPD) and vehicle type by downloading from sofcopy / hardcopy given by manufacturer or Operator. Facility is provided to transfer details of Transshipment Vehicles parked in temporary yard to be considered for export.

- **Gate In**
  System provides to update Transport Vehicle details, driver name and system assign gate in date and time. System provides to update Export Vehicle details by selecting from pre-advice list or by manual entry. System provides to update details by BARCODE system.

- **Parked Yard Position Updation**
  System facilitates to upload parked position by BARCODE / RF Reader / Manual entry. System maintains inventory based on Vehicle Identification Number and Parked Yard Location. System provides to update damage details, if any. System provides to update internal shifting of vehicles and maintain on-line yard inventory.

- **RORO Vessel Definition**
  System provides to create RORO Vessel Master, with Tiers, Blocks, Columns, Rows and area of each segment. System provides to define doors of tiers, stair cases for each tier. Vessel Planning will be taken care based on the vessel definition.

- **Vessel Call Updation**
  System provides to update vessel call details, estimated arrival and departure details, actual arrival and departure details, berth allocation, service and other rotation details.

- **Export Vehicle List Generation**
  System generates Export Vehicle List based on Yard Inventory considering Export Vehicles, Transshipment Vehicles and Restows. System generates report based on POD wise, Vessel wise and Vehicle Type wise with summaries.
Vessel Planning

System plans vessel loading based on POD wise. System maintains the parameters like minimum distance between two vehicles, minimum distance between wall to vehicle, doors / stair cases in deck etc. System generates sequence list based on planned location and user can override it. System provides to plan in graphical mode and user can take tier wise planned details in graphical mode.

Loading List / Sequence List Generation

System gives provision to generate Sequence list for loading Vehicle into vessel. System generates Loading list by tier wise / vessel wise from bottom to top loading method.

Vehicle Loading Updation

System provides to update Vehicle loading details, loaded position in vessel, loaded by whom, loaded date and time using manual mode or using handle terminal (off line / online). System automatically clear the yard inventory and maintain vessel loaded list.

Loaded List / Final Vessel Plan generation

Based on vessel loading update, system generates loaded list and final vessel plan. System generates balance to load list if any in the yard.

Special Service Request

System has facility to record details of special service request (SSR). Cost implication of providing SSR is automatically taken care of by the billing module.

Vehicle Rollout from One Vessel to Another

System has the provision to rollover vehicle from one vessel to another. System monitors the vessel cutoff time, availability of vehicle in the yard, which are manifest and facilitate to roll out.

Back to Town Vehicles Details entry

System has provision to record details of Back to town vehicles with reasons like damages etc. Billing implications are automatically taken care of.
- **Ports Master**
  Facility to build the database of ports across the globe is availed.

**Import Operations**

- **Consolidation of Import Vehicles data**
  System provides facility to download Vehicle Details like Vehicle Identification Number, Chassis Number, manufacturing Details, POD, ORIGIN, FPD and vehicle type by downloading from softcopy given by manufacturer or Operator. Facility is also provided to manually update the imports information on to the system. Through this we can plan movement of Restow and Transshipment vehicles to Temporary Yard locations, while Import Vehicles to either direct Gate Out or to Import Yard.

- **Gate Out**
  The details of Vehicle being gated out need to be captured through BAR code facility at the time of Gate Out. System has facility either select or enter driver name and record system assign gate out date and time.

- **Parked Yard Position Updation**
  System facilitates to capture parked position in defined area of yard by BARCODE / RF Reader / Manual entry. System maintains inventory based on Vehicle Identification Number and Parked Yard Location. System also provides facility to update damage details, if any. System provides facility to update internal shifting of vehicles and maintain on-line yard inventory.

- **Special Service Request**
  System has facility to record details of special service request (SSR). Cost implication of providing SSR is automatically taken care of by the billing module.

**Yard Planning**

- **Yard Profile definition**
  User can define the yard in terms of Blocks, Rows and Columns basis. User can allocate the yard based on POD wise, Vehicle type wise, Customer wise, Weight wise. Yard can also be segregated primarily as import, export and temporary yard based on which parking of vehicles can be made. Restow and Transshipment vehicles can be planned for parking in Temporary Yard.
- **House Keeping**
  Facility to assist in house keeping the vehicles in yard is availed through generating the sequence list, loading / unloading plan. All the movements are recorded through Radio data Terminals (RDTs) at the time of loading / unloading in the yard.

**Yard Operations**

- **Yard Shifting**
  System has facility to remotely update the vehicle movement information during shifting through Radio Data Terminals (RDTs).

- **Graphical View of Yard**
  System displays graphical representation of yard on selective parameters like POD, Vessel, Import, Export, Restows, Transshipment and so on. This supports planner to identify location of vehicle, housekeeping and allocation of resource.

- **Sequence List**
  System generates sequence list for Vessel Loading and Unloading. Sequence list can also be generated, segregated on tier / resource. Balance sequence list can also be generated to support employees during shift change.

- **Yard Inventory**
  Facility to generate yard inventory list based on Type, Location, Agent, POD, Vessel. Location of any vehicle in the yard can also be identified through the query.

**ICD Operations**

- **Train scheduling**
  Facility is availed to define inbound and outbound train schedules.

- **Pre-advice updation**
  System has provision to upload the pre advice information to manifest the vehicle for loading / discharge planning

- **Train loading / discharge planning**
  System has provision to allocate RMGs to load / discharge the containers / carriages on the wagons.

- **Train loading / discharge data updation**
  Data updation related to containers loaded / discharged on the wagons can be remotely updated through RDT.
Billing

- **Master Definition**
  User can build the master profile of agent, line and account holder through the facility availed.

- **Tariff Structure Definition**
  The tariff structure can be maintained by authorized users for terminal services. System provides to update tariff like HANDLING, LOADING, UNLOADING, SHUTOUT etc. on event based.

- **Storage Slab definition**
  System provides to update slabs for storage charges based on vehicle type and duration with BASE rates and customized rates for different customers.

- **Billing towards Vehicle Storage**
  System has facility to bill storage charges for export vehicle and Import Vehicle. Tariff structure can also defined for activities on Restows and Transshipment vehicles.

- **Billing towards Special Service Requests**
  System has facility to bifurcate records based on special service requests demanded / addressed for handling a vehicle. Billing towards special service requests can be generated with these bifurcated heads.

- **Billing towards exceptional heads**
  Facility is availed to generate exceptional report to track unbilled heads, if any. Facility to bill towards the unbilled heads is also availed.

- **Credit Notes generation**
  Facility to create credit notes against approval is also provided.

- **Auto mailing of Invoices to customer**
  Facility to electronically mail the invoices to the customer at predefined schedule is provided.