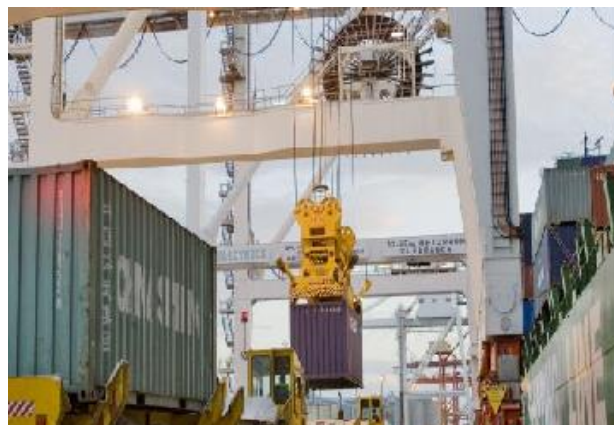




Container Terminal Suite

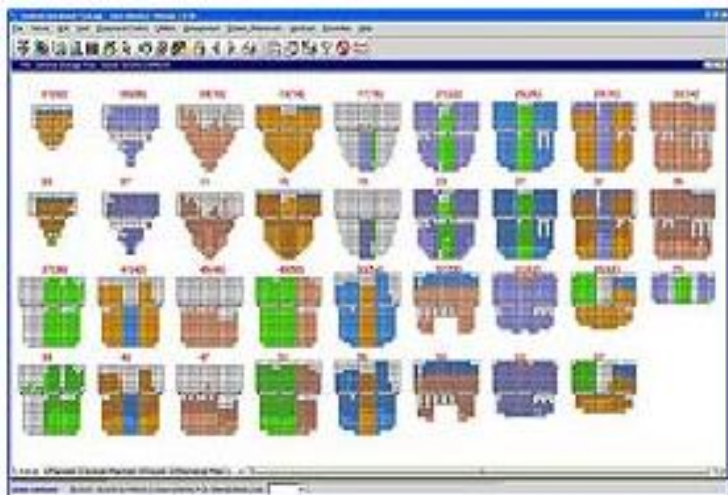
Container Terminal Operating System

Container Terminal Suite (CTS TOS) streamlines the process flow of various activities of a container terminal operation. This includes processes related to Vessel Operation, ICD Operation, Yard Operation, Documentation, Vessel Planning, Yard Planning and Billing. Modern technology supports managing the services remotely, systematically and efficiently. This enhances improvised throughput, efficient resource management and meeting delivery timelines. Advanced technology also supports secured data storage and retrieval in efficient mode for analysis. This helps in synchronizing the needs of Operations, Engineering and Finance departments through a common solution.



CTS TOS from **V&V Comptech Systems** offers one-stop solution to systemize all operational activities of Container Terminal. Adoption of **CTS TOS** builds integrity amongst Documentation, Engineering, Operations, Planning and Commercial departments. Robustness built into the application is the key feature. The product has undergone rigorous testing prior to being implemented on live environment, thereby has gained high sense of applaud by our customers. **V&V Comptech Systems** is proud to own **CTS TOS** which has proven it's potential to satisfy all levels of users, be it on shop floor or the top management.

- **Framework**
 - IIS Platform
 - ASP.Net
 - Angular JS (fast process approach)
 - jQuery
 - Node JS for Equipment Interface
 - HTML 5
 - Google Map Interface / Google API interface
 - Web Service Interface with plugins to internal and external interfaces
 - GPS / GPRS Interface
- **Portability**
 - Portable for any Browser
 - Dynamic portable to any resolution
- **Mobile App**
 - Android
 - IOS
 - Windows
- **Database**
 - Support SQL Server
 - Support Oracle
 - Encrypted and pre-compiled controls





- **Documentation**

Import / Export Advance List

The system facilitates agents to upload Import / Export Advance List remotely through internet. The system provides agents user name and password to enhance security for the uploaded container information. The information can also be uploaded by the documentation operator manually using either hard or soft copy.

Container Pre Advice

System facilitates provision to update Container Pre-advice details related to ICD and TP containers. Pre advice information can also be uploaded by the documentation operator manually using either hard or soft copy.

Customs Documents

Facility is available to record information related to statutory customs documents of the container. This also facilitates provision to record EGM and IGM information.

Container Holding / Releasing

System provides facility to release or hold the container based on the manifest. The provision is also available to update this record on request either by Agent or Terminal or Customer or Customs. Provision to record the reason for holding the container is available.

Customer Grievances

Any information related to the container can be available through this facility thereby providing online information to address customer queries on the same. Facility to edit information of container based on customer request like POD change, Seal Number change, VIA change and so on is available. Segregation of billable and non-billable tasks are automatically taken care of in the billing module.

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.

Container Rollout

System has the provision to rollover container from one vessel to another. System monitors the vessel cutoff time, availability of container in the yard, container manifest for roll out. Provision is also available to cancel the roll out for ICD, Reefer and TP containers if desired. System also has provision to rollover container based on Agents / Shipping Line request.

Vessel Scheduling

Facility is provided to update vessel schedule details. Window provisioning to reserve berth for the vessel is also available. System shall enhance terminal activities based on the declared cut off time for the vessel.

ICD – Train Scheduling

Facility is provided to update train schedule details. Provision to reserve the line for train on arrival is available.

Container Parameters definition

System has provision to define container parameters like ISO code, IMDG number, UN Number, Temperature, Commodity, Size and so on.

Back to Town Container Details entry

System has provision to record details of Back to town containers. Billing implications are automatically taken care of.



- **Gate Operation**

- Container Gate In operation**

- Facility to enter the details related to Export Container Gate In operation is available. On entering the container number, system shall display the manifest details. Gate operator need to enter truck details, seal verification details, container damage details, if any. System shall generate EIR and display the yard location for unloading the container as per the yard plan. BAT number shall also be allotted on EIR generation.

- Container Gate Out Operation**

- On submission of EIR for container gate-out, system avails facility to record container Facility to record container gate-out details like scanned information, holding if any, document verification details and so on is available. System shall close the EIR thereby BAT number is freed for next process.

- EIR Generation**

- System has facility to generate EIR for all the gate operations including Empty truck gate in and empty truck gate out.

- CODECCO generation**

- System has the provision to generate CODECCO files and mail the information to agents at predefined interval.

- Vessel Cut-off Verification for Export Containers**

- Alarming facility to highlight SSR declaration for containers to be gated in after vessel cut-off time is available. Decision of accepting the container on SSR is not mandatory.

- Container Survey**

- Facility is available to record the container survey details including scanned images, damage details and so on.

- **Yard Planning**

- Yard Profile definition**

- User can define the yard in terms of Blocks, Rows and Columns basis. User can define the permissible limit of stack for the yard. User can allocate the yard based on POD wise, Commodity wise, Size wise, Weight wise. System cross verifies the suitability of yard location for Reefers, HAZ as per IMDG code. Space segregation can be made based on import, export, ICD, transshipment.

- Yard Planning begins with segregation of blocks based on various attributes like Vessel / Import / Export / ICD / POD / Commodity. The system shall generate summary of yard plan based on which the container location can be defined at the time of gate in.

- House Keeping**

- Facility to assist in house keeping the containers in yard is available through generating the sequence list, loading / unloading plan. All the movements are recorded through Radio data Terminals (RDT) at the time of loading / unloading in the yard.



• Yard Operations

Yard Shifting

System has facility to remotely update the container movement information during shifting through Radio Data Terminals (RDT).

Graphical View of Yard

System displays graphical representation of yard on selective parameters like POD, Vessel, Import, Export, ICD and so on. This supports planner to identify location of container, housekeeping, and allocation of equipment and so on.

Sequence List

System generates sequence list for Vessel Loading and Unloading. Sequence list can also be generated segregated on bay or equipment. Balance sequence list can also be generated to support employees during shift change.

Yard Inventory

Facility to generate yard inventory list based on Size, Location, Agent, POD, Vessel, Weight range and Commodity. Location of any container in the yard can also be identified through the query.

• Vessel Planning

Vessel Definition

Facility is availed to define the vessel information. The details on line, structure, service, ownership, call sign and engine parameters can be recorded. Facility to copy the information for sister ships is also availed.

Bays and Hatch definition

Facility is availed to define bays, stacks / tiers on decks / under decks, hatch covers in the vessel. System shall display the graphical representation of bay and user can define deck, under deck, hatch covers and cells in graphical layout. User can define the permissible weight, height of cells in the bay.

Commodity and Size Definition

User can define permissible sizes like 20", 40", 45" or Twin containers and also define restricted commodity like reefer, HAZ, HC, ODC for the cell. IMDG Code, Reefer Points can also be defined in graphical layout of the bay.

Service Profile Definition

User can define Service profile with information on route followed and the sequence of Ports to be visited.

Downloading of EDI - BAPLIE

User can download the EDI-BAPLIE file given from the previous port / shipping line. Facility is availed to download container details and segregate the import containers to be unloaded from the vessel. System shall prepare the current vessel plan based on the EDI-BAPLIE.

Plan approval

System facilitates the user to plan for the vessel in the following sequence:

- Download EDI - BAPLIE to know the vessel plan as per previous Port.
- Identify import containers in the vessel
- Identify open slots in the bay
- Identify export containers in the yard, either through yard inventory or the advance list
- Allocation of containers from the graphical representation of yard through drag and drop in the open cells based on various parameters like POD, Size, Height, weight, Reefer plug-ins, Commodity, IMDG code and so on.
- Generate graphical bay plan and BAPLIE for Vessel operator's approval
- Incorporation of changes in the bay plan instructed by vessel operator



• Vessel Operations

Sequence List Generation

System shall generate the Sequence List based on approved vessel plan. User can generate the partial sequence list of loading or unloading of containers with allotted crane or selected bay.

Vessel Loading / Discharge

System shall provide facility to enter the details of loaded / unloaded containers remotely through Radio Data Terminal (RDT). System facilitates displaying message on the RDT against cross verification of the movement as per the bay plan.

Tower Control monitoring

Facility to remotely monitor the loading / unloading of containers on vessel through graphical representation is availed. System provides online sequence list to allocate trucks for lifting the containers. Facility to direct truckers to pick the containers can be addressed through VHF or RFID equipments.

Balance Sequence List generation

System shall also generate the Balance Sequence List based on Vessel Plan, and current load / unload status. User can also generate the partial balance sequence list of containers allotted for the crane or bay wise to ascertain effective equipment usage.

• 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 container for loading / discharge planning

Train loading / discharge planning

System has provision to allocate RMGs to load / discharge the containers on the wagons.

Train loading / discharge data updation

Data updation related to containers loaded / discharged on the wagons can be remotely updated through RDT.

• Resource Management

- Scheduling of Quay Cranes (QC), Gantry Cranes (GC) against the bays
- Allotment of Rubber Tyred Gantry (RTG), Reach Stacker (RS), Empty Container Handler (ECH) based on the vessel movement and gate movement
- Allotment of ITVs for container movements based on Vessel Loading / Unloading Sequences, ICD loading / unloading sequences, House keeping.
- Allotment of Rail Mounted Gantry (RMG) against wagons for container loading / unloading on train.
- Facility to assess performance of equipment and field staff based on productivity.



• **Billing**

Agent / line / Account Holder Master definition

User can create / edit the master data of agent, line and account holder through the facility availed.

Tariff structure definition

The tariff structure can be maintained by the authorized users for the terminal services. Slabs for the storage charges based on size, duration and commodity may be defined. Power on and power off charges for reefer containers can also be defined. Facility to bill in multi currency by considering the conversion factor maintained by customer on daily basis is availed.

Billing for Container handling for vessel

System has facility to generate the bills against vessel loading and unloading for the agents or account holders after vessel sail. Facility to define billable heads in container handling for loading / unloading is availed. Hatch cover handling charges are billed towards shipping line at the time of vessel billing. Restows handling charges are billed towards agent.

Billing towards Import Containers Storage

System has facility to bill storage charges for import container in yard and also containers gated out. This helps to track the net charges due towards each container in the yard at any given point of time. Provision is made to generate bills of gated out containers separately. Charge towards power usage by reefer containers is also taken care of while billing.

Billing towards Export Containers Storage

System has facility to bill storage charges for export container after vessel sail. Charge towards power usage by reefer containers is also taken care of while billing.

Billing towards ICD Containers Handling

System has the facility to generate bills towards ICD handling charges after train departure for the agents or account holders.

Billing towards Special Service Requests

System has facility to bifurcate records based on special service requests demanded / addressed for handling a container. 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 the customer

Facility to electronically mail the invoices to the customer at predefined schedule is provided.

• **UN/EDIFACT files**

BAPLIE:	Bay Plan/ Stowage Plan
MOVINS:	Stowage Instruction
VESDEP:	Vessel Movement/ Daily Performance Report
COPRAR:	Container Loading and Discharge Order/ Advance Container List
COARRI:	Container Loading/Discharge Report
CODECO:	Container/Cargo Gate-in Gate-Out Report
COEDOR:	Container Stock Report