

MAKE YOUR RIGHT MOVES!



[WWW.CHESSCON.COM](http://WWW.CHESSCON.COM)

**CHESSCON**  
VIRTUAL TERMINAL



# CHESSCON

## VIRTUAL TERMINAL

A software tool to build a virtual copy of a  
real container terminal



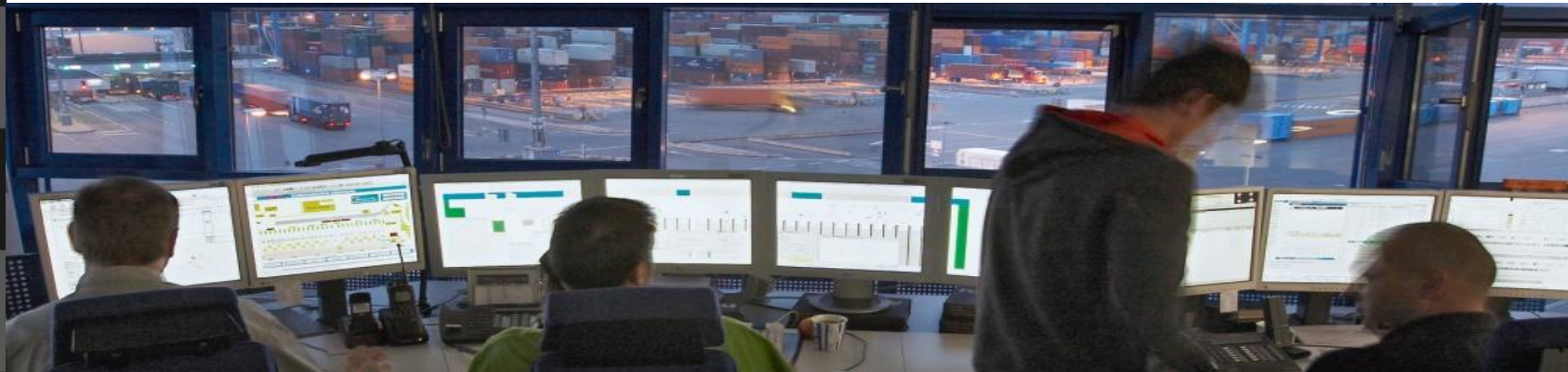
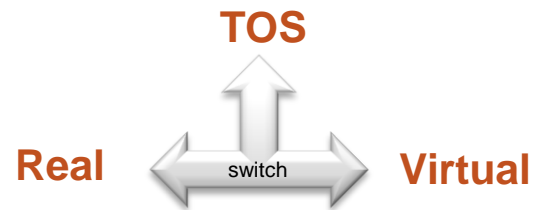


# The main mission of CHESSCON VIRTUAL TERMINAL

what you can do with CHESSCON



- use your Terminal Operation System (TOS)
- use your software interfaces
- but use a **Virtual Container Terminal**





## Main fields of CHESSCON VIRTUAL TERMINAL

what can you do with a virtual container terminal?



- Support of planning and reorganisation of container terminals
- Support of development & testing of Terminal Operation Systems (TOS)
- Validating the TOS setting & functionality
- Fine tuning of TOS strategies
- On-the-job training of TOS operators
- and more e.g.:
  - 3D device or container information & location systems.
  - Training or advertising movies.



Original CHESSCON screenshot



## Benefits using CHESSCON VIRTUAL TERMINAL

why it makes sense to use it



- Improve your terminal
  - ✓ productivity (e.g. with better TOS settings or better strategies)
  - ✓ availability ( e.g. real devices not needed while testing)
  - ✓ stability (e.g. more tested as before)
  
- Reduce your
  - ✓ risk (e.g. more tests possible as with real terminal)
  - ✓ COST (e.g. a virtual device generates no operational costs)





## Key features of CHESSCON VIRTUAL TERMINAL

why CHESSCON not other software?



- User friendly (e.g. easy design of virtual terminals, ...)
- Flexible and scalable (e.g. take your own 3D models & emulators, ...)
- Open & service oriented architecture (e.g. open XML based interface, ...)
- Distributed module based system (e.g. more than one 3D animation possible, ...)
- 3D animation faster than real-time (e.g. 100 times faster as real-time, ...)
- Detailed on & off-line evaluation (e.g. On & off-line productivity charts, ...)



Original CHESSCON screenshot



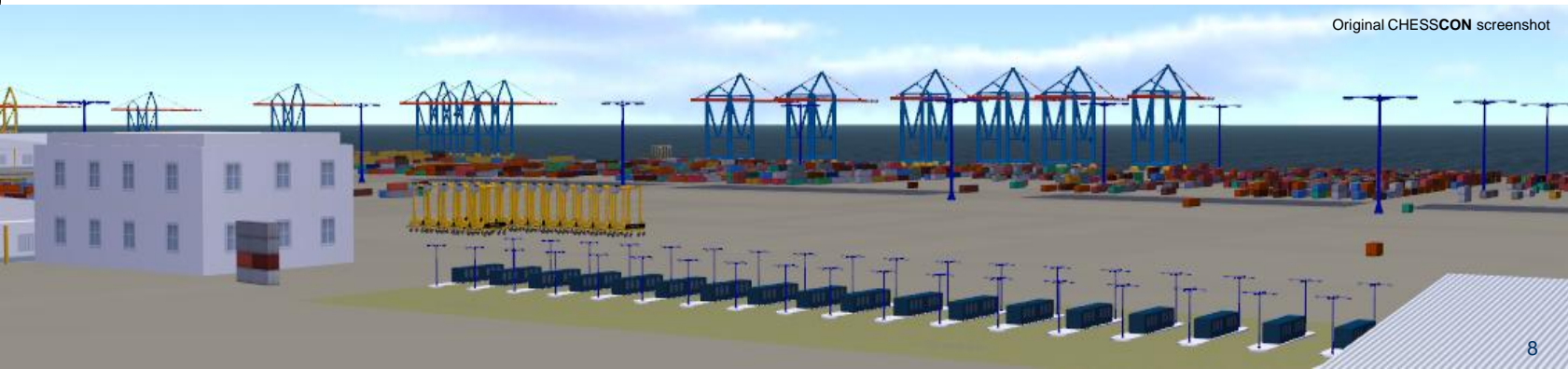
## Supported terminal areas

what can you design with CHESSCON?



- Container stacks with single Containers  
(real position, size and color, more than 100,000 Ct's are no problem)
- Internal and external traffic network with one-way roads
- In /Out Gates
- Truck interchanges
- Rail tracks
- Berth (Quay) areas
- Parking areas
- Other areas like warehouses, office buildings, ...  
(import of own 3D models is possible - e.g. in 3ds format)

*All supported areas in an **unlimited quantity**  
and created only with **one Mouse click***



Original CHESSCON screenshot



## Terminal devices in the standard package

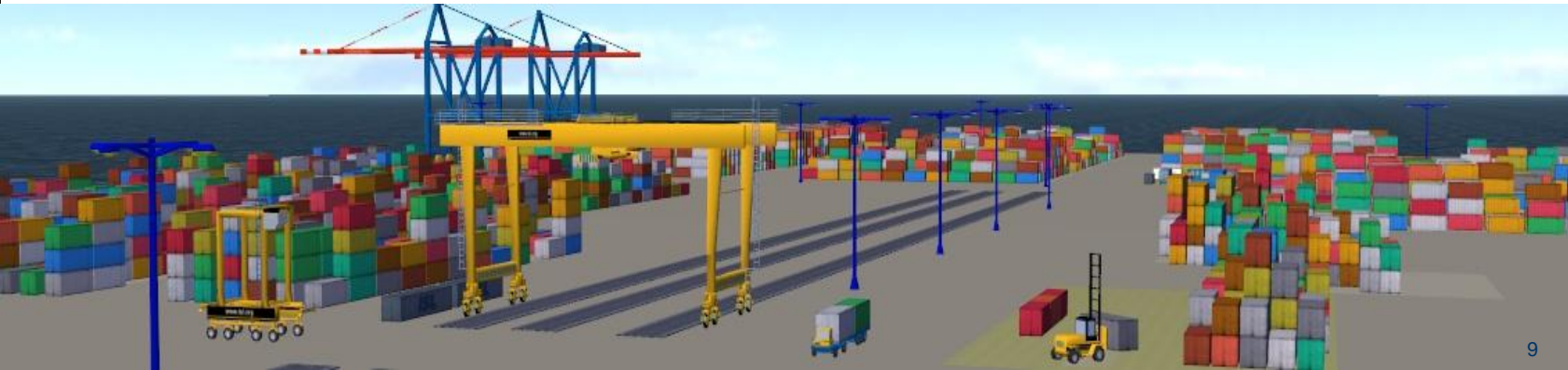
what can be moved with CHESSCON?



- Vessels (real dimension, Baplie import, variable quay position, ...)
- Quay Cranes (twin, tandem, dual cycling, variable active lanes, collision control ...)
- Straddle Carriers (single and twin lift, several types, ....)
- Front Loader, Reachstacker (single and twin lift, several types, ....)
- External Trucks (round trips, twin, ...)
- RMG, ASC and RTG \*
- Terminal-Chassis and AVGs\*

*All in an unlimited quantity and with  
customizable technical data & models  
Created with only one Mouse click*

\* under development





## Individual features

what can additionally be done with CHESSCON?



- Interface to TOS
- Special logic of internal equipment handling (especially manned devices)
- Import of terminal layout (direct import or comparison between TOS and ViTO)
- Straddle Carrier, Terminal Chassis, AGVs: collision control in the traffic network
- Import of external device emulators (also written in other languages, e.g. Java)
- Other devices on request...



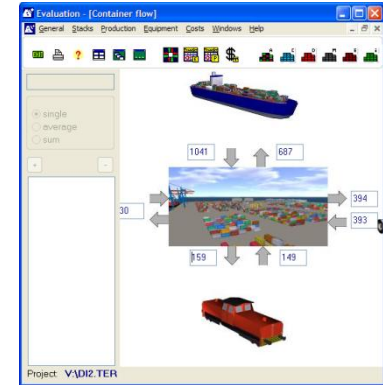
Original CHESSCON screenshot

# CHESSCON main modules

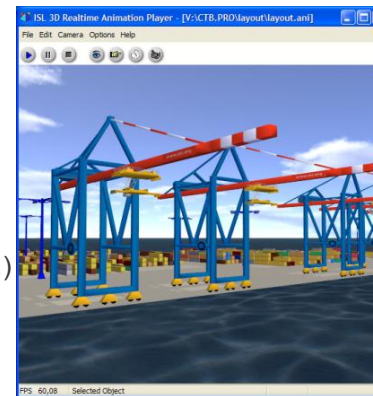
what programs can be used

- Project Manager
- 2D Terminal Editor
- 3D Terminal Viewer
- Input Module (base data)
- Simulation Module (SCUSY simulation)
- Emulation Manager (with more than 10 emulators)
- Evaluation Module
- Utilities (e.g. vessel designer, import & check programs, ...)

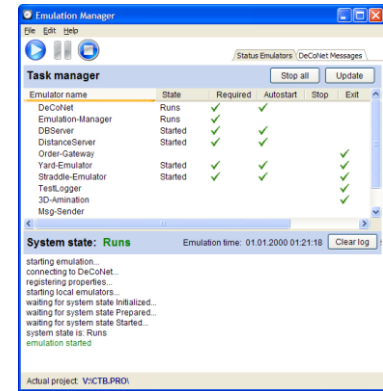
## Evaluation Module



## 3D Terminal Viewer



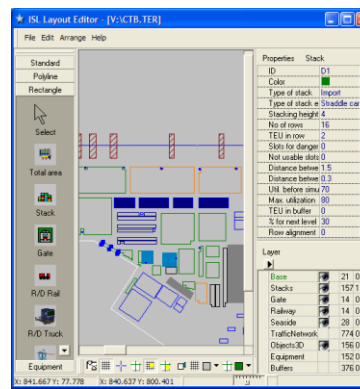
## Emulation Manager



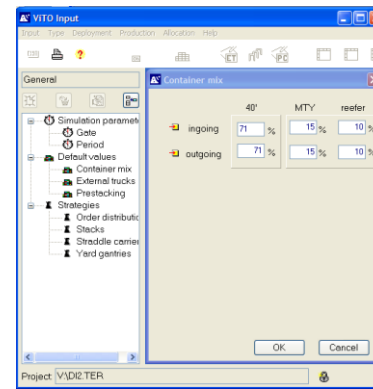
## Project Manager



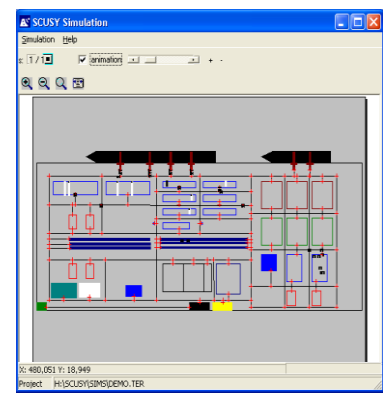
## Terminal Editor



## Input Module



## Simulation



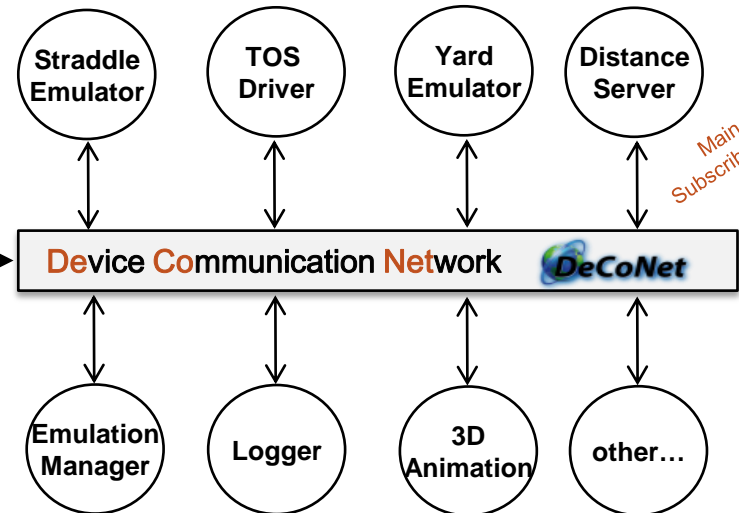
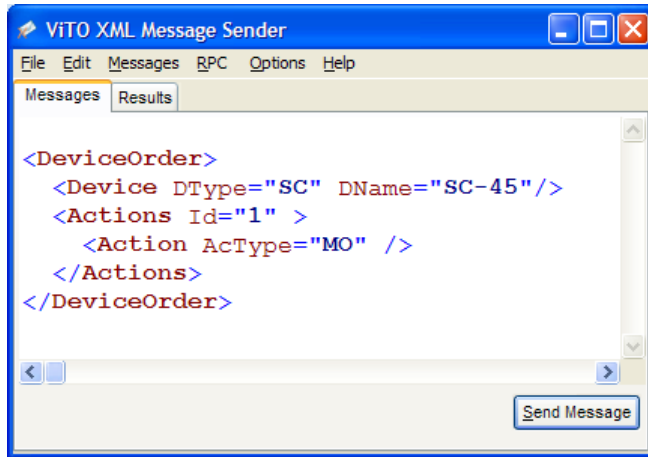


# Interfaces of CHESCON VIRTUAL TERMINAL

what I have to put in and what I get out?



# Message exchange between clients $\Rightarrow$ XML



Main concept :  
Subscribe your message

See also:  
CHESSCON VT Interface Specification

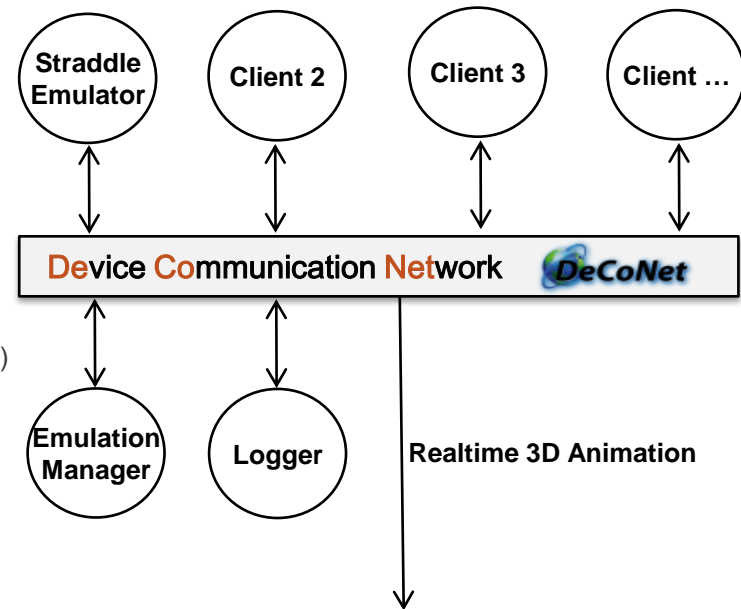


# DeCoNet Overview

how does CHESSCON VIRTUAL TERMINAL works internally?



- DeCoNet = CHESSCON VIRTUAL TERMINAL communication server
- XML Message based
- Main concept: Subscribe your message
- Integrated state and time management
- Distributed (install your emulators on different computers)
- Based on .Net WCF (Windows Communication Foundation)
- Open for other Programming Languages (e.g. Delphi , C#, C++, Visual Basic, Java)





**APPLICATIONS**

**THANK YOU FOR YOUR ATTENTION**

**ISL APPLICATIONS GMBH**

Barkhausenstrasse 2

27568 Bremerhaven

Germany

[WWW.ISL-APPLICATIONS.COM](http://WWW.ISL-APPLICATIONS.COM)