

# Capacity & Delivery Scheduling

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A Powerful Scheduling Solution for your Shop, Work and Delivery needs.

contract  ERP  
a COMPUSOFT product

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# Agenda

- 1 Why use contractERP Capacity & Delivery Scheduling?
- 2 Details on various Scheduling Models (Auto-Scheduling vs. Visual Manual Scheduling)
- 3 Definition of Capacity & Delivery Setup Models
- 4 Using the Visual Boards to manage your Capacity & Delivery Scheduling Needs
- 5 Questions / Open Discussion



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# Why use contractERP Capacity & Delivery Scheduling?

- Help take control of your customer commitments.
  - contractERP is a date-driven system, and this allows you to leverage the dates you are already using
- Eliminate Pencil & Paper Scheduling
  - Using REAL data about your products to calculate Capacity
- Leverage a powerful Auto-Scheduling algorithm combined with contractERP Alerts
  - contractERP auto-scheduler from Contracts & Sales Orders
  - Alerts and Notifications
  - Lead Times, Production Times & Additional Constraints, and Delivery / Shipping Lead Times

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# Why use contractERP Capacity & Delivery Scheduling?

- Take Control over your Shop Floor
  - Let your dates and the scheduler work for you.
  - Visually schedule and confirm production.
- Attribute-Driven Second Capacity Layer—Workstations
  - Leverage Workstations to schedule special operations.
  - Painting, Bending, Special Preps.
  - Secondary Capacity Constraint, Capacity Group agnostic.
  - Workstation Capacity Controls can span multiple Capacity Groups.
  - Auto Scheduler will weigh both capacity levels.
- Visually build and manage your schedules for Production and Delivery
  - System automatically schedules Production and Delivery.
  - Users manipulate schedule using Drag & Drop Interface.
  - Checks and Balances on every movement (Capacity, End Date not Past Delivery Date, etc.)

Capacity Schedule

Find Refresh Save All Update Days to View Batch Move Capacity Group Break & Sort Columns Show 0 Capacity Dates

FIELD INSTALL FRAME INSTALL GLAZING INSTALL LI IGU LOUVERS MISC MISCELLANEOUS NY IGU PW/AW/CS

**SCHEDULED LINES**

Save	Shop Orders Exist	Sequence No.	Accumulative Qty.	Unit Capacity	Total Capacity	Qty.	Item No.	Description	Associated Document Type	Associated Document No.	Associated Line No.	Associated Component Line No.	Shop Order No.	Comp. P.O. Lines	Posted Shop Order No.	Job No.	Customer No.	Customer Name	Salesperson Name
Monday, April 4, 2022 (100%) 20 of 20																			
Not Batched																			
	0	1	2	2	1	2100AW	2100 Awning	Sales Ord...	SO-100730	30000	0					HOFSTRA UNIVERSITY	BIGAPPLE	Big Apple Desig...	Shawn Luc
	0	3	2	4	2	2100CS	2100 Casement	Sales Ord...	SO-100730	40000	0					HOFSTRA UNIVERSITY	BIGAPPLE	Big Apple Desig...	Shawn Luc
	0	4	2	2	1	2100CS	2100 Casement	Sales Ord...	SO-100730	50000	0					HOFSTRA UNIVERSITY	BIGAPPLE	Big Apple Desig...	Shawn Luc
	0	5	2	2	1	2100AW	2100 Awning	Sales Ord...	SO-100731	10000	0					BURTONS SCHOOL	BIGAPPLE	Big Apple Desig...	Shawn Luc
	0	6	2	2	1	2100CS	2100 Casement	Sales Ord...	SO-100731	20000	0					BURTONS SCHOOL	BIGAPPLE	Big Apple Desig...	Shawn Luc
	0	7	1	1	1	2100PW	2100 Picture	Sales Ord...	SO-100731	30000	0					BURTONS SCHOOL	BIGAPPLE	Big Apple Desig...	Shawn Luc
	0	8	2	2	1	2100AW	2100 Awning	Sales Ord...	SO-100732	10000	0					BURLINGTON MALL	CUNY	City University ...	Shawn Luc
	0	9	2	2	1	2100AW	2100 Awning	Sales Ord...	SO-100732	20000	0					BURLINGTON MALL	CUNY	City University ...	Shawn Luc
	0	10	2	2	1	2100CS	2100 Casement	Sales Ord...	SO-100732	30000	0					BURLINGTON MALL	CUNY	City University ...	Shawn Luc
	0	11	1	1	1	2100PW	2100 Picture	Sales Ord...	SO-100732	40000	0					BURLINGTON MALL	CUNY	City University ...	Shawn Luc
Tuesday, April 5, 2022 (100%) 20 of 20																			
Not Batched																			
	0	2	2	4	2	2100AW	2100 Awning	Sales Ord...	SO-100730	10000	0					HOFSTRA UNIVERSITY	BIGAPPLE	Big Apple Desig...	Shawn Luc
	0	3	2	2	1	2100AW	2100 Awning	Sales Ord...	SO-100730	20000	0					HOFSTRA UNIVERSITY	BIGAPPLE	Big Apple Desig...	Shawn Luc

**REQUIRES SCHEDULING**

Save	Shop Orders Exist	Qty.	Item No.	Description	Confirmed	Associated Document Type	Associated Document No.	Associated Change Order No.	Associated Line No.	Associated Component Line No.	Shop Order No.	Submittal Order No.	Priority Order	Rush Order	Order Status
		33	2100CS	2100 Casement	<input checked="" type="checkbox"/>	Sales Order	SO-100730		30000	0	SO-100739		<input checked="" type="checkbox"/>	<input type="checkbox"/>	Released
		44	2100PW	2100 Picture	<input type="checkbox"/>	Sales Order	SO-100739		30000	0	SO-100739		<input type="checkbox"/>	<input type="checkbox"/>	Released

Monday, April 4, 2022 (100%) 20 of 20

Tuesday, April 5, 2022 (100%) 20 of 20

**Wednesday, April 6, 2022 (250.0%) 50 of 20**

Thursday, April 7, 2022 (0%) 0 of 20

Friday, April 8, 2022 (0%) 0 of 20

Monday, April 11, 2022 (0%) 0 of 20

Tuesday, April 12, 2022 (0%) 0 of 20

Wednesday, April 13, 2022 (0%) 0 of 20

Thursday, April 14, 2022 (0%) 0 of 20

Friday, April 15, 2022 (0%) 0 of 20

Monday, April 18, 2022 (0%) 0 of 20

Tuesday, April 19, 2022 (0%) 0 of 20

Wednesday, April 20, 2022 (0%) 0 of 20

Thursday, April 21, 2022 (0%) 0 of 20

Friday, April 22, 2022 (0%) 0 of 20

Monday, April 25, 2022 (0%) 0 of 20

# Support for multiple Scheduling Models

## Manual vs. Auto-Scheduling

### Auto-Scheduling

- Utilize System Setups to drive Scheduling.
- Multiple Capacity Groups for different Product Types.
- Rules and Parameters to guide Scheduling.

### Manual Scheduling

- Can set system up to drop all Orders to Requires Scheduling.
- User can manually review data and Schedule Lines.
- Good if you don't have data to support Auto-Scheduling.

### Auto & Manual

- Even after Auto-schedule, Lines can be moved.
- Auto Schedule Failures can manually be moved.
- Changes to individual day capacity & commitments.

# Capacity Definition / Models

## **Capacity Setups are Purposefully Flexible.**

The setups for Capacity in contractERP are purposefully flexible. We support most any model you can dream up.

Capacity setups for Production / Work are set up separately from Delivery Capacity so you can define Capacity one way for Production / Work and another for Delivery.



Capacity Group Card

HM FRAMES

Scheduling Detail | Related | Fewer options

**General**

Code ..... HM FRAMES

Description ..... Hollow-Metal Frames

Type ..... Shop

Scheduling Option ..... Capacity Scheduler

Unit of Measure Code ..... EA

Exclude Shipping Lead Time .....

Production Time ..... 3D

Prod. Buffer Time ..... 1D

Worksheet Line Max Capacity ..... 0

Include Lines from same Worksheet Batch and Rele...

Worksheet Line Over Capacity Rule ..... Required Scheduling

Add Base Unit Capacity to Resource Capacity .....

**Capacity**

**General**

Capacity Buffer ..... 2

Buffer from Current Date ..... 0

Sunday Capacity ..... 0

Monday Capacity ..... 50

Tuesday Capacity ..... 50

Wednesday Capacity ..... 50

Thursday Capacity ..... 50

Friday Capacity ..... 50

Saturday Capacity ..... 0

**Priority**

Priority Capacity Buffer ..... 0

Priority Buffer from Current Date ..... 0

Priority Sunday Capacity ..... 0

Priority Monday Capacity ..... 5

Priority Tuesday Capacity ..... 5

Priority Wednesday Capacity ..... 5

Priority Thursday Capacity ..... 5

Priority Friday Capacity ..... 5

Priority Saturday Capacity ..... 0

# Setting up Capacity Groups

## Define your Capacity Measurements

### Capacity Definition

- Define Capacity any way you want. Hours / Minutes / Units / Dimensional.
- Capacity Group Setups just need to match Item / Resource Setups.
- Resource used to Add to a Base Capacity.
- Flexibility not only by product, but also by specific Item + Preparations.

### Capacity Options

- Ability to set Customers as Priority. They have their own Capacity Bucket.
- Production Time and Production Buffer Time are used to calculate Start / End / Shipment Dates.
- Separate Hierarchy for Production Time & Buffer Time.
  - Item / Capacity Group Setup
  - Item / SKU Card
  - Item Card
  - Capacity Group Card

# Delivery Scheduling Setups

## Delivery Zones

### Delivery Zones

- Delivery Zones Default in from Multiple places:
  - Customer / Ship To
  - Zip Code
  - Shipment Method / Agent
  - Others!
- Typically represents Geography. Flexible in Design.
- Zones are attached to Delivery Schedule Groups.
- Setting Zones on Documents Drives Scheduling.

### Delivery Zone Options

- No. of Backward & Forward Scheduling Attempts
  - Used by Auto Scheduler w/ Requested Date.
  - Get Product to the customer early or late – Configurable.
- Shipping Lead Time
  - Used to get from Shipment Date to Delivery Date.
- No. of Allowed Days in Warehouse after Production
  - Make sure finished product isn't cluttering the Warehouse.
  - Drag and Drops on Capacity Schedule will check this setting.

Delivery Zones

Search + New Edit List Delete

Code ↑	Description	No. of Backward Sch. Attempts	No. of Forward Sch. Attempts	Shipping Lead Time	No. of Allowed Days in Warehouse After Production	Pickup
CT	Connecticut	10	5	2D	1	<input type="checkbox"/>
CUSTOMER		0	0		0	<input type="checkbox"/>
LTL	National	10	5	1D	0	<input type="checkbox"/>
MA	Massachusetts	10	5	1D	2	<input type="checkbox"/>
MD	Maryland	0	0		0	<input type="checkbox"/>
MILWAUKEE A...	Milwaukee Area	10	10	1D	5	<input type="checkbox"/>
NJ	New Jersey	10	5	1D	2	<input type="checkbox"/>
NY	New York	10	5	1D	2	<input type="checkbox"/>
PA	Pennsylvania	10	5	1D	0	<input type="checkbox"/>
→ WC	: Will-Call	10	5	0D	0	<input checked="" type="checkbox"/>



# Delivery Scheduling Setups

## Delivery Schedule Groups

Delivery Schedule Groups

Search + New Manage | Related Fewer options

Code ↑	Description	Will Call	Only Incl... Ship... Rou...	Sunday Capacity	Monday Capacity	Tuesday Capacity	Wednesday Capacity	Thursday Capacity	Friday Capacity	Saturday Capacity	Scheduled Capacity Qty.	Posted Scheduled Capacity Qty.	Reserved Delivery Route Qty.	Seque... Exist	Posted Seque... Exist	Qty. Committed
CT	Connecticut	<input type="checkbox"/>	<input type="checkbox"/>	0	100	100	100	100	100	0	5.00	11.00	0.00	No	Yes	0.00
MA	Massachusetts	<input type="checkbox"/>	<input type="checkbox"/>	0	100	100	100	100	100	0	0.00	0.00	0.00	No	No	0.00
NATIONAL	National (LTL)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	1,000	1,000	1,000	1,000	1,000	0	0.00	0.00	0.00	No	No	0.00
NY/NJ	NY/NJ	<input type="checkbox"/>	<input type="checkbox"/>	0	200	200	200	200	200	0	82.00	127.00	0.00	No	No	0.00
PA	Pennsylvania	<input type="checkbox"/>	<input type="checkbox"/>	0	50	50	50	50	50	0	0.00	0.00	0.00	No	No	0.00
WILL_CALL	Will Call	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	1,000	1,000	1,000	1,000	1,000	0	0.00	578.00	0.00	No	No	0.00

### Delivery Schedule Groups

- Zones are Tied to Groups.
- Zones can belong to more than one Group.
- Delivery Schedule Groups commonly Set Up as a Route servicing one or more Geographical Zones.
- Auto-Scheduler will find the first Zone / Schedule Group combination that has capacity available for the order.

### Delivery Schedule Group Options

- Delivery Schedule Groups hold Capacity Settings.
- These Capacity Settings are a Day of the Week Setting.
- Flexibility like Capacity groups in Capacity Setup.
- Delivery Unit Capacity available in Front End Integration XML.

# Capacity and Delivery Boards In Use

Let's see the Boards in use!

## Capacity Schedule

- Layout of Capacity Schedule
- Scheduled vs. Requires Scheduling
- Drag & Drop Interface
- Split Lines
- Set up Commitments
- Update Capacity / Day
- Batch & Sequence Rules & Functionality
- Create Shop Orders

## Delivery Schedule

- Discuss Data available to Schedulers
- Drag & Drop Interface
- Filters
- Create Routes Function
- Sequence Via Bing Maps (Auto & Manual)
- Paperwork (Shipping Itinerary, Packing and Picking Lists)

