



**FastTrak® WM+**  
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File	Version	Full Path
msoclib	3.0.0.0	C:\WINDOWS\system32
System (InterRail) Name	3.0.0.0	C:\WINDOWS\system32
System	3.0.0.0	C:\WINDOWS\system32
System Drawing	3.0.0.0	C:\WINDOWS\system32
FastTrakName	3.0.0.0	D:\GRS\FastTrak\
g\batch	3.0.0.3	D:\GRS\FastTrak\
WorkItemLocationNameList Drive	3.0.2003.18	D:\GRS\FastTrak\
g\Control	3.0.0.2	D:\GRS\FastTrak\
g\collection	3.0.0.1	D:\GRS\FastTrak\
g\Custom	3.0.0.0	D:\GRS\FastTrak\

**GRSI**

# ***FastTrak***® WM+ software suite

Automate, integrate, and control your warehouse



***FastTrak***® WM+  
*Integration made easy*™



# Today's presentation

- GRSI overview
- **FastTrak**® WM+ functionality
  - WMS (Warehouse Management System)
  - WCS (Warehouse Control System)
  - OMS (Order Management System)
    - Cartonization
  - PI (Packaging Integration)
    - Last-100-Feet (L1F™)
- **FastTrak**® WM+ screenshots
- Questions and next steps



# GRSI

- Founded in 1987
  - Focus on supply chain solutions
  - Headquarters in Conshohocken, PA (Philadelphia)
  - Regional offices spanning the U.S.
- **FastTrak**® WM+ software suite
- Merger with Invata in 2011



# Focus and goals

- Single source for all automation solutions
  - Design
  - Installation
  - Software
  - Equipment
  - 24x7x365 support
- Goals
  - Speed
  - Accuracy
  - Quality
  - Support
  - Space utilization



# GRSI/Invata offering

- Experience and support
  - Since 1987
  - Over 70 sites with more than 100 implemented systems
  - Manage and design complex integrated projects
  - 24x7x365 support
  - Onboard messaging and troubleshooting diagnostics



# GRSI/Invata offering (cont.)

- Integration and management systems to support distribution
  - Interface with all ERP, WMS, and legacy systems
    - Total systems and gap functionality
  - Cartonization
  - Print and apply labeling systems
  - Document and pack list insertion
  - Conveyor routing and sorting
  - Engineering, controls, and software integration
    - Support and view of all devices and subsystems
  - Location and inventory management
  - Picking, putting, batching, waving, and waveless management
  - Slotting and SKU management
  - In-motion and automated order fulfillment
  - Mobile applications
  - Shipping and manifesting



# GRSI clients



**FasTrak® WM+ – Integration made easy™**

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# Invata clients

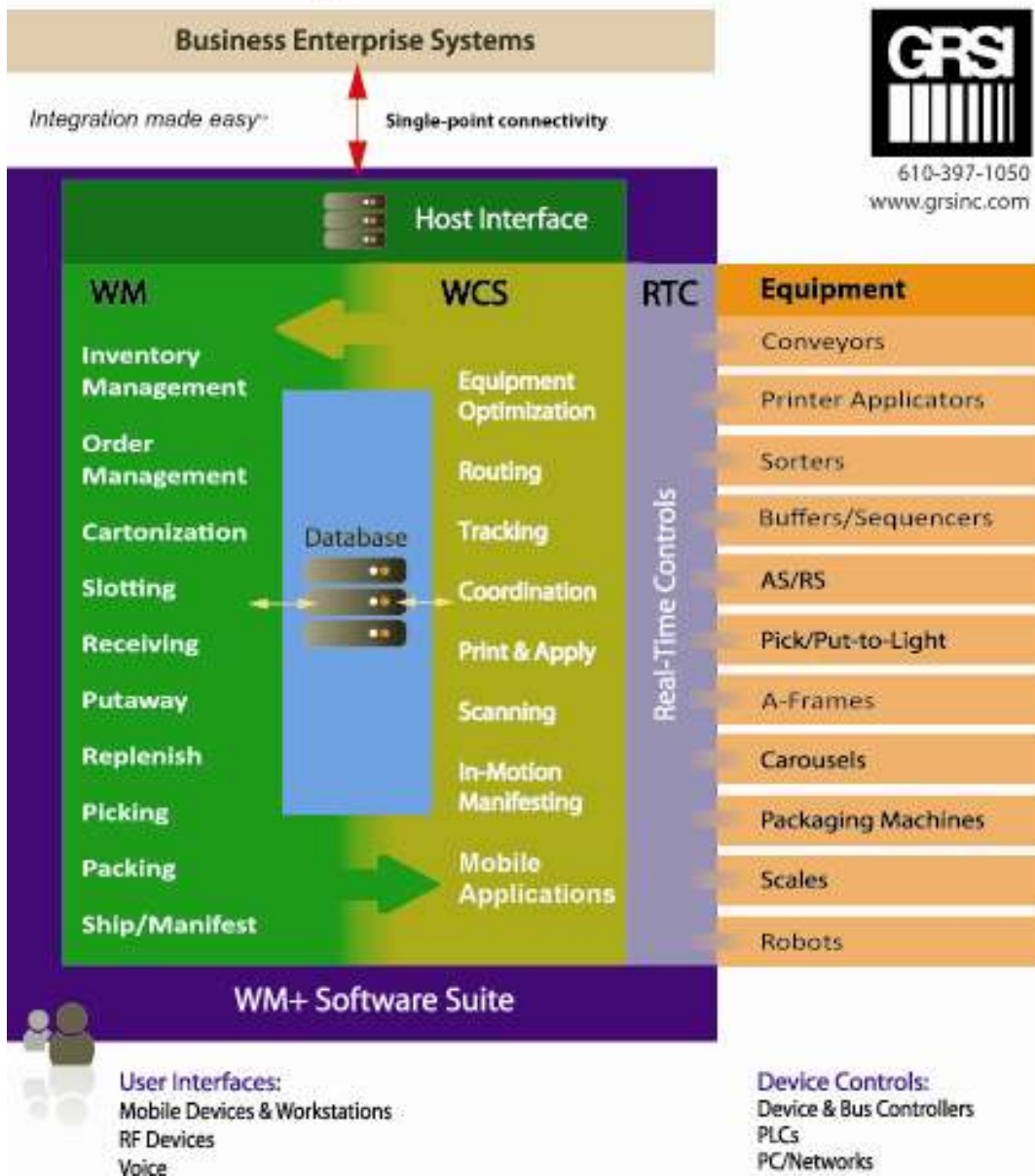


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# FastTrak<sup>®</sup> WM+ System Architecture



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# FastTrak WM+

- Open architecture
  - Microsoft .NET
  - Microsoft SQL server
  - Microsoft Windows
  - Source code licensing
- Latest version for enhanced automation
- Full service warehouse integration
- Capable of expansion for future growth
- 24x7x365 life-cycle support - no daisy chain information and no finger pointing



# FastTrak WM+ software suite

Distribution software for today and tomorrow

- WMS
- OMS: Order and SKU management
- WCS manages all equipment and subsystems
- PI (Packaging Integration) system
- Diagnostics and troubleshooting
  - Onboard and remote
- *FastTrak* code
  - Base *FastTrak* license includes source code availability for escrow purposes
  - Source code can be quoted for client use and modification. Special GRSI support arrangements must be made.



# FastTrak WMS

- Manages
  - Inventory and inventory in-motion – Example AS/RS, buffer systems, A-frames, and carousels
  - Batching, waving, and waveless
  - SKUs with slotting and cartonization
  - Vision, information, and real time information about inventory and systems planning and performance
  - Support – anytime, anywhere



# Why typical WMS' fail in automated environments

- Weak chain of communication between WMS and devices
- Too slow to make commutations within an automated environment
- Does not manage or understand new equipment and subsystems
- Does not understand inventory in-motion
- Does not manage PLCs
  - Relies on others to do the work and support
- Does not directly support equipment and subsystems



# FastTrak OMS

- Batching, waving, and waveless management
- Pick-to-light, voice picking, RF picking, AS/RS, carousels, and A-frame management
- Cartonization



# FastTrak Cartonization

## Making the right choices

- Choose the optimal size carton for each order
- Less material, labor, and freight
- Fight new DIM rules
- Attractive packaging
- Sustainability



# Opportunities for improvement

- Excessive packaging
- Too much void fill
- Damage
- Labor costs
- Delivery commitments
- Freight cost
- Lower returns
- Sustainability
- Dissatisfied customers



# What is Cartonization?

- Knowledge based system of SKU data and business rules
- How to select the proper size carton, bag, mailer, and flat
- Understand and reduce the total cost of the carton/order
  - Material
    - Carton size and type
    - Void fill
    - Tape, type, and amount
    - Labels
    - Documents/Inserts
  - Freight/carrier costs
  - Labor associated with “building” the order



# SKU attributes

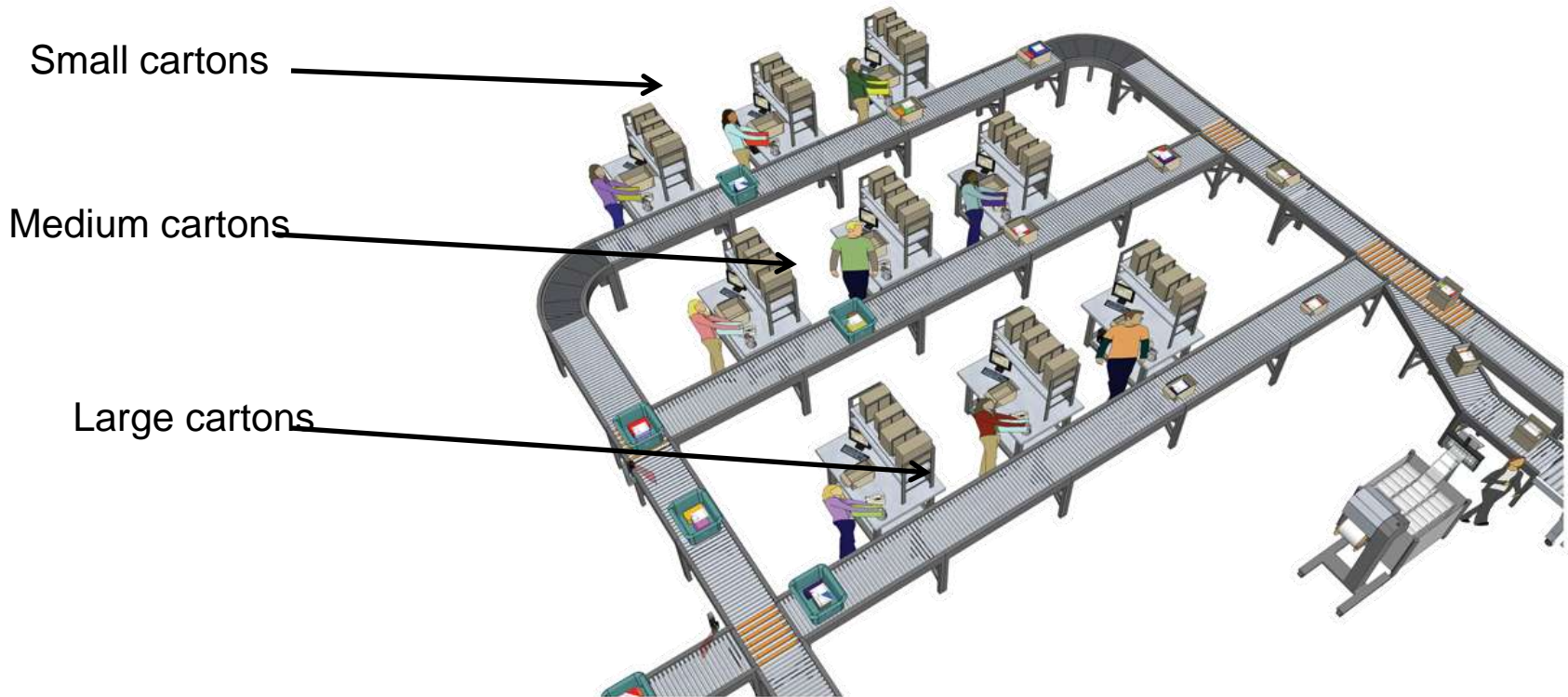
- Dimensions (LxWxH)
- Weight
- Position
  - Ex. Always upright or always on top
  - Protecting with bubble wrap creates new size
- Family rules: Liquids, electronics, jewelry, and other SKUs for special handling
- Value of SKU
- Client business rules for SKU
- Fragility – Packing an egg with a hammer



# Route by packaging

Setup pack stations tailored to specific packaging types

- Pick to tote
- Routed to pack station for appropriate packaging type/size



# FastTrak WCS

- Automates
  - All material handling and flow equipment into one streamlined system
- Coordinates
  - Communicates all information with the ERP, WMS, or other host with a single port connection
- Integrates
  - Interfacing for all WMS, ERP, and homegrown host systems
  - Integrates devices, equipment, and subsystems in a real-time world
- Controls
  - Automation equipment in real-time



# FastTrak PI

- Controls all Last-100-Feet (L1F™) operations
  - Packing
  - Carton erecting
  - Document and pack list insertion
  - Void fill management
  - Weighing
  - Print and apply labeling
  - Sorting
  - Tracking
  - Shipping and manifesting systems



# L1F™ value added services

- Attractive, sustainable package
  - Brand identification
  - Positive environmental reputation
- Custom information
  - Pack list
  - Personalized notes (“Welcome back!”)
- Literature inserting (Cross-promotion: “You might also like this.”)
- Gift wrap (Happy Birthday, Happy Holidays)
- Email notifications
- Special services – Ex. Personal service



# Packaging automation results

	<u>Labor</u>
• DBL	55 to 10
• Koch Entertainment	23 to 1
• USMC	12 to 3
• Contac Services	50 to 12
• Danbury Mint	18 to 2
• ADP	26 to 3
• Nordstrom's	30 to 3

**Labor cost went from \$0.62 to 0.02 per order!**





# FastTrak screenshots

The screenshot displays the FastRoute software interface on a Windows operating system. The window title is "FastRoute on CLEVGR5SRV1". The interface is divided into several sections:

- R1 Log:** A table with columns: Time, Escort, ParcelID, Lane, Process Dur, Confirm Dur. Data rows show times from 14:09:35 to 14:09:54.
- R2 Log:** A table with columns: Time, Escort, ParcelID, Lane, Process Dur, Confirm Dur. Data rows show times from 14:09:37 to 14:09:54.
- R3 Log:** A table with columns: Time, Escort, ParcelID, Lane, Process Dur, Confirm Dur. Data rows show times from 14:09:35 to 14:09:54.
- Sorter Log:** A table with columns: Time, Escort, ParcelID, Lane, Process Dur, Confirm Dur. Data rows show times from 14:09:35 to 14:09:54.
- PPTL Log:** A table with columns: Time, Type, USB Device, Address, Location, Area, Text Display, Text Action, Button Light, Button Enable, Process E. Data rows show times from 14:14:06 to 14:14:35.

At the bottom of the interface, there is a control panel with buttons for Exit, Start, Pause, Stop, R1, R2, R3, Sorter, PPTL, and WMS I/F. Below the buttons, a status bar shows: Success: 100%, No-Read: 0%, Data Error: 0%, Hardware: 0%, and a green progress indicator.

**Turning data into valuable information**



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# Main screen

FastRoute on CLEVGR55RV1

File Utility Help

**R1 Log**

Time	Escort	ParcelID	Lane	Process Dur	Confirm Dur
14:09:35	4	T000000405	Straight	0.042	0.002
14:09:37	5	T000000405		0.045	0.004
14:09:39	6	T000000405		0.044	0.004
14:09:45	7	T000000405		0.003	0.003
14:09:47	8	T000000404		0.010	0.004
14:09:49	9	T000000400	RT01R	0.007	0.003
14:09:51	10	T000000406	RT01L	0.010	0.004
14:09:54	11	T000000403	RT01L	0.009	0.004

Scanner:

**R2 Log**

Time	Escort	ParcelID	Lane	Process Dur	Confirm Dur
14:09:35	4	T000000415	RT02R	0.061	0.032
14:09:37	5	T000000418	Straight	0.089	0.022
14:09:39	6	T000000417		0.054	0.022
14:09:45	7	T000000417		0.056	0.002
14:09:47	8	T000000410		0.007	0.007
14:09:49	9	T000000410		0.044	0.029
14:09:51	10	T000000416	RT02R	0.044	0.029
14:09:54	11	T000000413	RT02R	0.025	0.003

Scanner:

**R3 Log**

Time	Escort	ParcelID	Lane	Process Dur	Confirm Dur
14:09:35	4	T000000425	RT03L	0.107	0.079
14:09:37	5	T000000428	Straight	0.145	0.041
14:09:39	6	T000000427	RT03R	0.130	0.046
14:09:45	7	T000000427		0.004	0.004
14:09:47	8	T000000427		0.002	0.002
14:09:49	9	T000000427		0.002	0.002
14:09:51	10	T000000426	RT03L	0.010	0.004
14:09:54	11	T000000423	RT03R	0.007	0.003

Scanner:

**Sorter Log**

Time	Escort	ParcelID	Lane	Process Dur	Confirm Dur
14:09:35	4	T000000435	SRT02	0.087	0.058
14:09:37	5	T000000438	SRT01	0.184	0.056
14:09:39	6	T000000437	SRT03	0.175	0.067
14:09:45	7	T000000439		0.059	0.059
14:09:47	8	T000000439		0.003	0.003
14:09:49	9	T000000430		0.006	0.006
14:09:52	10	T000000436	SRT03	0.071	0.020
14:09:54	11	T000000433	SRT03	0.021	0.019

Scanner:

**PPTL Log**   WMS I/F Log   Exception Log

Time	Type	USB Device	Address	Location	Area	Text Display	Text Action	Button Light	Button Enable	Process Dur
14:14:06	0100 - Display	0	10104	PH01C04	P2L1	0020	Static	Green	False	0.004
14:14:14	0100 - Display	0	10105				Static	Green	False	0.005
14:14:19	0100 - Display	0	10106				Static	Green	False	0.005
14:14:22	0100 - Display	0	10104				Static	Green	False	0.005
14:14:26	0100 - Display	0	10201				Static	Green	False	0.005
14:14:29	0100 - Display	0	10000	Multiple (+2)		0020	Static	Green	False	0.004
14:14:35	0100 - Display	0	10000	PH02C04	P2L2	0000	Static	Red	False	0.006

Exit Start Pause Stop

R1 R2 R3 Sorter PPTL WMS I/F

Success: 100%   No-Read: 0%   Data Error: 0%   Hardware: 0%

Buttons, indicators, statistics



# Host interface log

- Time stamp
- Message
- Full audit trail

The screenshot displays the 'FastRoute on CLEVRSSRV1' application. It features several log windows and a main data table. The logs show detailed processing information including time, escort, parcel ID, lane, process duration, and confirmation duration. The main data table, titled 'Scanner:', is currently displaying the 'WMS I/F Log' tab. An arrow points from this tab to the main data table below.

Time	Remote	Dir	Data
14:14:01	192.168.30.54:30001	In	000019 0100 P2L1 PH01C03 GREEN 0020
14:14:06	192.168.30.54:30001	In	000020 0100 P2L1 PH01C04 GREEN 0020
14:14:14	192.168.30.54:30001	In	000021 0100 P2L1 PH01C05 GREEN 0020
14:14:19	192.168.30.54:30001	In	000022 0100 P2L1 PH01C06 GREEN 0010
14:14:22	192.168.30.54:30001	In	000023 0100 P2L1 PH01C04 GREEN 0030
14:14:26	192.168.30.54:30001	In	000024 0100 P2L1 PH02A01 GREEN 0030
14:14:29	192.168.30.54:30001	In	000025 0100 P2L1 PH01C01 GREEN 0020 PH01C02 GREEN 0020
14:14:35	192.168.30.54:30001	In	000026 0100 P2L2 PH02C04 RED 0000

Endpoints: 1 Connected



# Pick/put-to-light logs

- Time stamp
- Message
- Action
- Full audit trail
- Duration/response

The screenshot displays the 'FastRoute on CLEVRSSRV1' application window. It features several data tables and log sections:

- R1 Log:** A table with columns: Time, Escort, ParcelID, Lane, Process Dur, Confirm Dur. It shows a list of operations with timestamps from 14:09:35 to 14:09:54.
- R2 Log:** A table with columns: Time, Escort, ParcelID, Lane, Process Dur, Confirm Dur. It shows a list of operations with timestamps from 14:09:35 to 14:09:54.
- R3 Log:** A table with columns: Time, Escort, ParcelID, Lane, Process Dur, Confirm Dur. It shows a list of operations with timestamps from 14:09:35 to 14:09:54.
- Scanner:** A table with columns: Time, Escort, ParcelID, Lane, Process Dur, Confirm Dur. It shows a list of operations with timestamps from 14:09:35 to 14:09:54.
- Sorter Log:** A table with columns: Time, Escort, ParcelID, Lane, Process Dur, Confirm Dur. It shows a list of operations with timestamps from 14:09:35 to 14:09:54.
- WMS I/F Log:** A table with columns: Time, Type, USB Device, Address, Location, Area, Text Display, Text Action, Button Light, Button Enable, Process C.
- PPTL Log:** A table with columns: Time, Type, USB Device, Address, Location, Area, Text Display, Text Action, Button Light, Button Enable, Process C.

A black arrow points from the 'PPTL Log' table to a specific entry in the 'Scanner' log, which is highlighted in the screenshot.

Time	Escort	ParcelID	Lane	Process Dur	Confirm Dur
14:09:35	4	T000000405	Straight	0.042	0.002
14:09:37	5	T000000408	RT01R	0.045	0.004
14:09:39	6	T000000407	RT01R	0.046	0.004
14:09:45	7	T000000409	RT01R	0.008	0.003
14:09:47	8	T000000404	RT01L	0.010	0.004
14:09:49	9	T000000400	RT01R	0.007	0.003
14:09:51	10	T000000406	RT01L	0.010	0.004
14:09:54	11	T000000403	RT01L	0.009	0.004

Time	Escort	ParcelID	Lane	Process Dur	Confirm Dur
14:09:35	4	T000000425	RT03L	0.107	0.079
14:09:37	5	T000000428	Straight	0.145	0.041
14:09:39	6	T000000427	RT03L	0.130	0.046
14:09:45	7	T000000429	RT03R	0.146	0.004
14:09:47	8	T000000424	RT03L	0.009	0.002
14:09:49	9	T000000420	Straight	0.009	0.002
14:09:51	10	T000000426	RT03L	0.010	0.004
14:09:54	11	T000000423	RT03R	0.007	0.003

Time	Escort	ParcelID	Lane	Process Dur	Confirm Dur
14:09:35	4	T000000435	SR10Z	0.087	0.058
14:09:37	5	T000000438	SR101	0.184	0.056
14:09:39	6	T000000437	SR102	0.175	0.067
14:09:45	7	T000000439	SR102	0.005	0.059
14:09:47	8	T000000434	SR102	0.044	0.003
14:09:49	9	T000000430	SR102	0.023	0.006
14:09:52	10	T000000436	SR103	0.071	0.020
14:09:54	11	T000000433	SR103	0.021	0.019

Time	Type	USB Device	Address	Location	Area	Text Display	Text Action	Button Light	Button Enable	Process C
14:14:06	0100 - Display	0	10104	PH01C04	P2L1	0020	Static	Green	False	0.004
14:14:14	0100 - Display	0	10105	PH01C05	P2L1	0020	Static	Green	False	0.005
14:14:19	0100 - Display	0	10106	PH01C06	P2L1	0010	Static	Green	False	0.005
14:14:22	0100 - Display	0	10104	PH01C04	P2L1	0030	Static	Green	False	0.005
14:14:26	0100 - Display	0	10201	PH02A01	P2L1	0030	Static	Green	False	0.005
14:14:29	0100 - Display	0		Multiple (+2)	P2L1	0020	Static	Green	False	0.004
14:14:35	0100 - Display	0	10000	PH02C04	P2L2	0000	Static	Red	False	0.006



# Sorter and smart routing logs

- Time stamp
- Disposition of each parcel
- Sort/route directive and confirmation
- Process duration
- Full audit trail

Time	Escort	ParcelID	Lane	Process Dur	Confirm Dur
14:09:35	4	T000000435	SRT02	0.087	0.058
14:09:37	5	T000000438	SRT01	0.184	0.056
14:09:39	6	T000000437	SRT02	0.175	0.067
14:09:45	7	T000000439	SRT02	0.005	0.059
14:09:47	8	T000000434	SRT02	0.044	0.003
14:09:49	9	T000000430	SRT02	0.023	0.006
14:09:52	10	T000000436	SRT03	0.071	0.020
14:09:54	11	T000000433	SRT03	0.021	0.019

Scanner:

Sorter Log

Time	Escort	ParcelID	Lane	Process Dur	Confirm Dur
14:09:35	4	T000000435	SRT02	0.087	0.058
14:09:37	5	T000000438	SRT01	0.184	0.056
14:09:39	6	T000000437	SRT02	0.175	0.067
14:09:45	7	T000000439	SRT02	0.005	0.059
14:09:47	8	T000000434	SRT02	0.044	0.003
14:09:49	9	T000000430	SRT02	0.023	0.006
14:09:52	10	T000000436	SRT03	0.071	0.020
14:09:54	11	T000000433	SRT03	0.021	0.019

Scanner:

Area	Text Display	Text Action	Button Light	Button Enable	Process C

Action	Button Light	Button Enable	Process C
	Green	False	0.004
	Green	False	0.005
	Green	False	0.005
	Green	False	0.005
	Green	False	0.005
	Green	False	0.004
	Red	False	0.006



# Drop down menus

- Dropdown menus
- Convenient access to all functions
- Utilities – support and configuration tools
- Powerful diagnostic suite
- Used for local and remote support

The screenshot displays the FastRoute software interface on a Windows operating system. The main window title is "FastRoute on CLEVGRSSRV1". The interface is divided into several panes. On the left, a pane labeled "R1 Log" shows a table of data with columns: Time, Escort, ParcelID, Lane, Process Dur, and Confirm Dur. A dropdown menu is open over this pane, listing options: "Pick Displays", "Display Modules...", "Messages", "Reset Statistics", "Comm Diagnostics...", and "IO Diagnostics...". An arrow points from the "Pick Displays" option to the "Process Dur" column header in the table below. The table below the menu has columns: Time, Escort, ParcelID, Lane, Process Dur, and Confirm Dur. The data rows are as follows:

Time	Escort	ParcelID	Lane	Process Dur	Confirm Dur
14:09:35	4	T000000425	RT03L	0.107	0.079
14:09:37	5	T000000428	Straight	0.145	0.041
14:09:39	6	T000000427	RT03L	0.130	0.046
14:09:45	7	T000000429	RT03R	0.146	0.004
14:09:47	8	T000000424	RT03L	0.009	0.002
14:09:49	9	T000000420	Straight	0.009	0.002
14:09:51	10	T000000406	RT01L	0.010	0.004
14:09:54	11	T000000403	RT01L	0.009	0.004

Other panes include "R2 Log", "R3 Log", and "Sorter Log", each with similar data tables. At the bottom, there are status indicators for "PPTL" and "WMS I/F" and a progress bar showing 0%.



# Buttons, indicators, and statistics

- Program status/control
- Sub-system start/stop
- Critical I/O indicators
- Statistics

The screenshot shows the 'FastRoute on CLEVRSSRV1' application window. It contains several data tables and control elements:

- R1 Log:**

Time	Escot	ParcelID	Lane	Process Dur	Confirm Dur
14:09:35	4	T000000405	Straight	0.042	0.002
14:09:37	5	T000000408	RT01R	0.045	0.004
14:09:39	6	T000000407	RT01R	0.046	0.004
14:09:45	7	T000000409	RT01R	0.008	0.003
14:09:47	8	T000000404	RT01L	0.010	0.004
14:09:49	9	T000000400	RT01R	0.007	0.003
14:09:51	10	T000000406	RT01L	0.010	0.004
14:09:54	11	T000000403	RT01L	0.009	0.004
- R2 Log:**

Time	Escot	ParcelID	Lane	Process Dur	Confirm Dur
14:09:35	4	T000000415	RT02H	0.061	0.032
14:09:37	5	T000000418	Straight	0.089	0.022
14:09:39	6	T000000417	RT02L	0.074	0.022
14:09:45	7	T000000419	RT02R	0.096	0.056
14:09:47	8	T000000414	RT02R	0.026	0.002
14:09:49	9	T000000410	RT02R	0.024	0.007
14:09:51	10	T000000416	RT02R	0.044	0.029
14:09:54	11	T000000413	RT02R	0.025	0.003
- R3 Log:**

Time	Escot	ParcelID	Lane	Process Dur	Confirm Dur
14:09:35	4	T000000425	RT03L	0.107	0.079
14:09:37	5	T000000428	Straight	0.145	0.041
14:09:39	6	T000000427	RT03L	0.130	0.046
14:09:45	7	T000000429	RT03R	0.146	0.004
14:09:47	8	T000000424	RT03L	0.009	0.002
14:09:49	9	T000000420	Straight	0.009	0.002
14:09:51	10	T000000426	RT03L	0.010	0.004
14:09:54	11	T000000423	RT03R	0.007	0.003
- Sorter Log:**

Time	Escot	ParcelID	Lane	Process Dur	Confirm Dur
14:09:35	4	T000000435	SR10Z	0.087	0.058
14:09:37	5	T000000438	SR10Z	0.184	0.056
14:09:39	6	T000000437	SR10Z	0.175	0.067
14:09:45	7	T000000439	SR10Z	0.005	0.059
14:09:47	8	T000000434	SR10Z	0.044	0.003
14:09:49	9	T000000430	SR10Z	0.023	0.006
14:09:52	10	T000000436	SR10Z	0.071	0.020
14:09:54	11	T000000433	SR10Z	0.021	0.019
- PPTL Log:**

Time	Type	WMS I/F Log	Exception Log	USB Device	Address	Location	Area	Text Display	Text Action	Button Light	Button Enable	Process [
14:14:06	0100 - Display			0	10104	PH01C04	P2L1	0020	Static	Green	False	0.004
14:14:14	0100 - Display			0	10105	PH01C05	P2L1	0020	Static	Green	False	0.005
14:14:19	0100 - Display			0	10106	PH01C06	P2L1	0010	Static	Green	False	0.005
14:14:22	0100 - Display			0	10104	PH01C04	P2L1	0030	Static	Green	False	0.005
14:14:26	0100 - Display			0	10201	PH02A01	P2L1	0030	Static	Green	False	0.005
14:14:29	0100 - Display			0		Multiple (+2)	P2L1	0020	Static	Green	False	0.004
14:14:35	0100 - Display			0	10000	PH02C04	P2L2	0000	Static	Red	False	0.006

At the bottom of the window, there are control buttons: Exit, Start, Pause, Stop, R1, R2, R3, Sorter, PPTL, and WMS I/F. An arrow points from the R3 button in this control bar to the R3 button in the software interface.

The control panel features a row of buttons: Exit (red stop), Start (play), Pause (yellow pause), Stop (red stop), R1 (green), R2 (green), R3 (green), Sorter (green), PPTL (green), and WMS I/F (green). Below the buttons, there are status indicators: a shield icon, 'Success: 100%', 'No-Read: 0%', 'Data Error: 0%', 'Hardware: 0%', and a row of four green buttons labeled 1, 2, 3, and E.



# Messaging

- Custom notification levels alert users about system events and errors
- Sent when processes are completed, started, or stopped
- Browser based and remotely accessible

The screenshot shows two overlapping windows from a GRS software interface. The top window, titled "Message History", displays a list of messages with columns for Time, Offset, Type, Code, Action, and Description. The bottom window, titled "Message Table", provides a detailed view of the messages with columns for Offset, Type, Code, Description, and Solution.

Time	Offset	Type	Code	Action	Description
10/30/2008 09:49:02	1	Information		Cleared	Motor MP4 fault.
10/30/2008 09:49:02	5	Error		Cleared	Emergency stop ESPCP-1-10 is engaged.
10/30/2008 09:39:41	5	Error		Raised	Emergency stop ESPCP-1-10 is engaged.

Offset	Type	Code	Description	Solution
0	Error		Motor MP4 fault.	Locate and clear the error and then press the <RESET> pushbutton.
1	Information		Motor MP4 fault.	Locate and clear the error and then press the <RESET> pushbutton.
2	Error		Motor MP2 fault.	Locate and clear the error and then press the <RESET> pushbutton.
3	Error		Motor MP1 fault.	Locate and clear the error and then press the <RESET> pushbutton.
4	Information		P2 conveyor full.	When the P2 conveyor clears, this condition will resolve itself.
5	Error		Emergency stop ESPCP-1-10 is engaged.	Reset the emergency stop and restart the system.
6	Error		Emergency stop ESPCP-2-10 is engaged.	Reset the emergency stop and restart the system.
7	Error		Emergency stop ESPCP-3-10 is engaged.	Reset the emergency stop and restart the system.



# Messaging – Multilingual capable

The screenshot shows a window titled "Current Messages" with a table of messages and a solution text area below it.

Ack	Time	Offset	Type	Code	Description
<input checked="" type="checkbox"/>	14:19:28	1			Motor MP4 fault.
<input type="checkbox"/>	14:19:29	2			Motor MP2 fault.
<input type="checkbox"/>	14:19:27	7			Emergency stop ESPCP-3-10 is engaged.

Solution:  
Locate and clear the error and then press the <RESET> pushbutton.

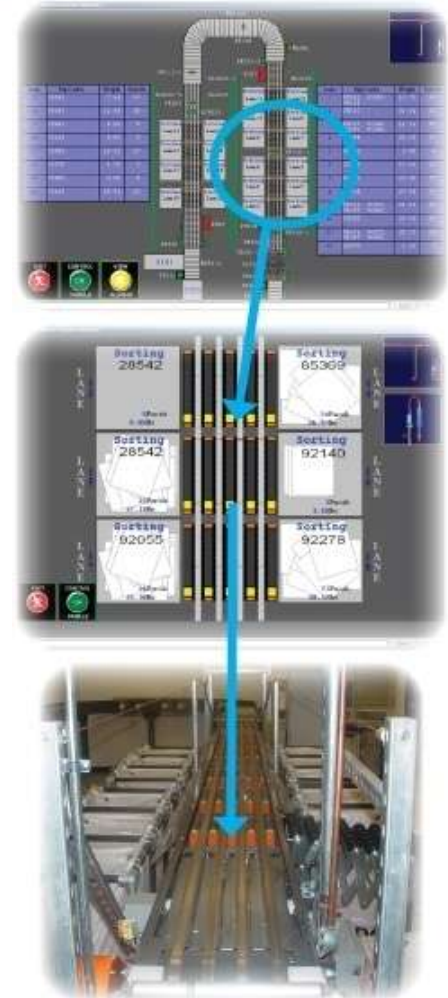
Buttons: Refresh, Ack all, OK, Cancel, Apply

Error →

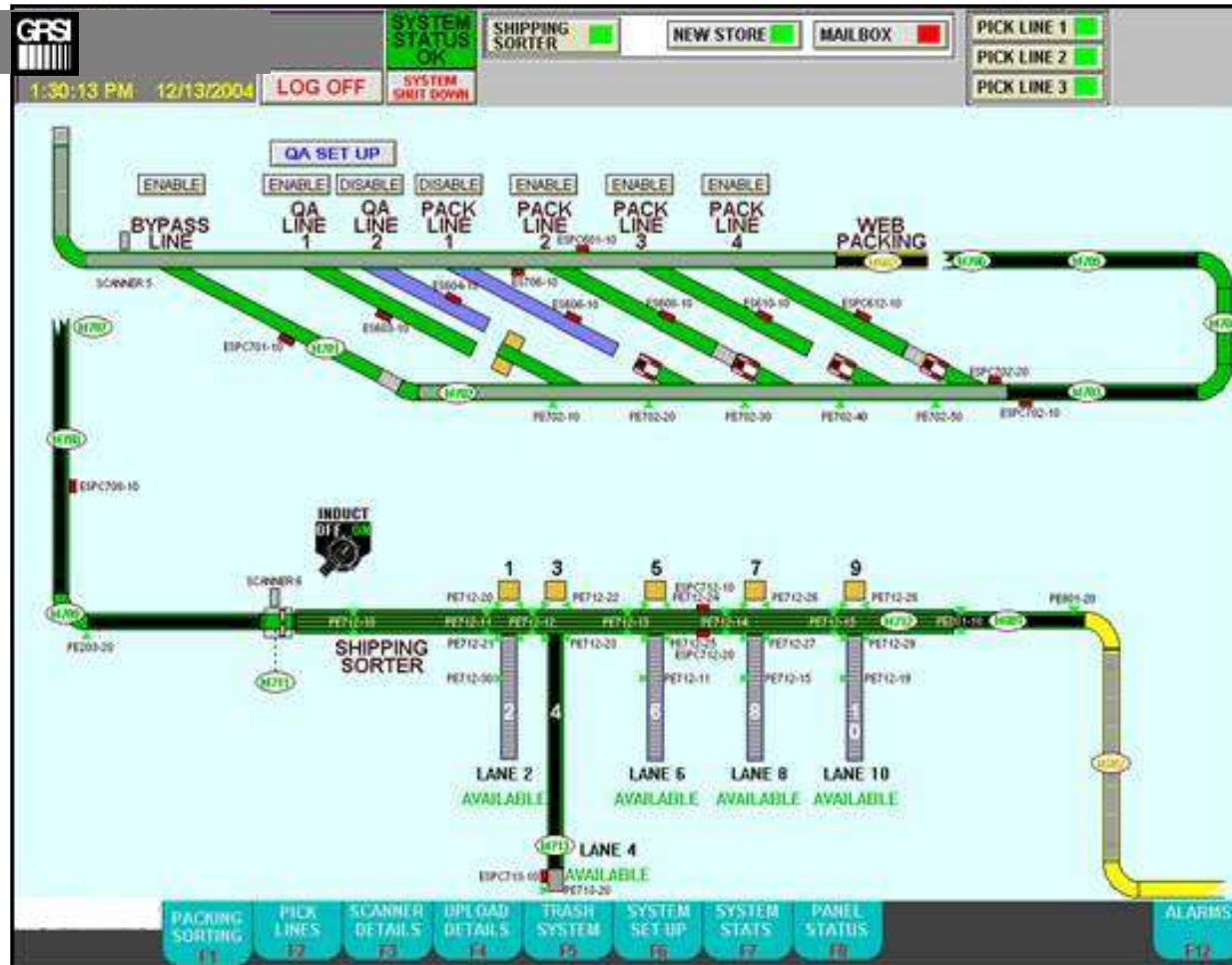
Solution →

# HMIs

- Graphic warehouse representation
- Real-time behavior of subsystems
- Details about each parcel
- Process performance
- Monitor and control operations

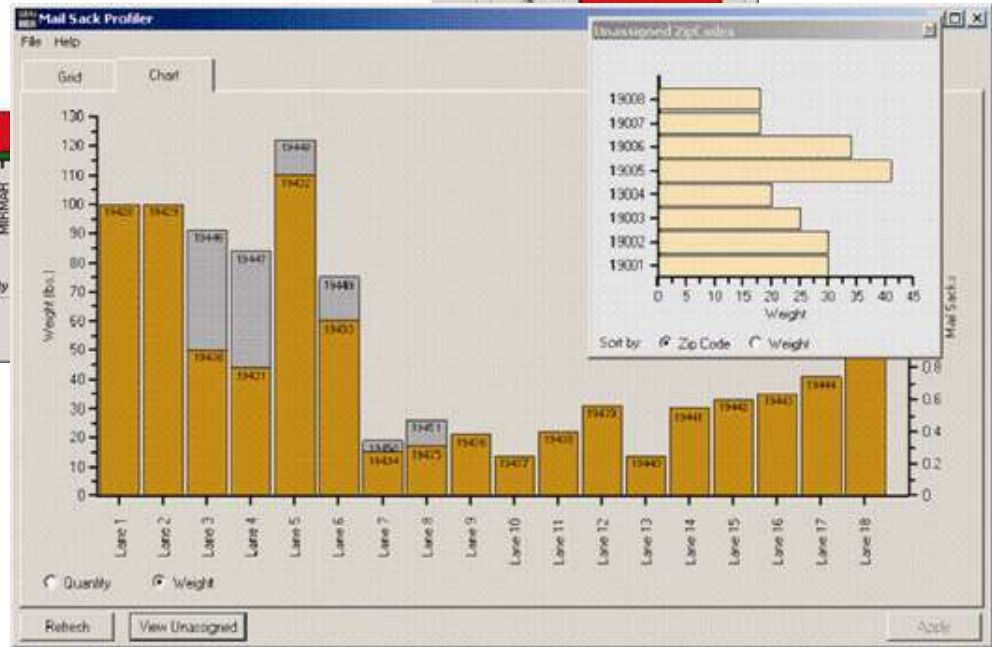


# HMI (Human Machine Interface)

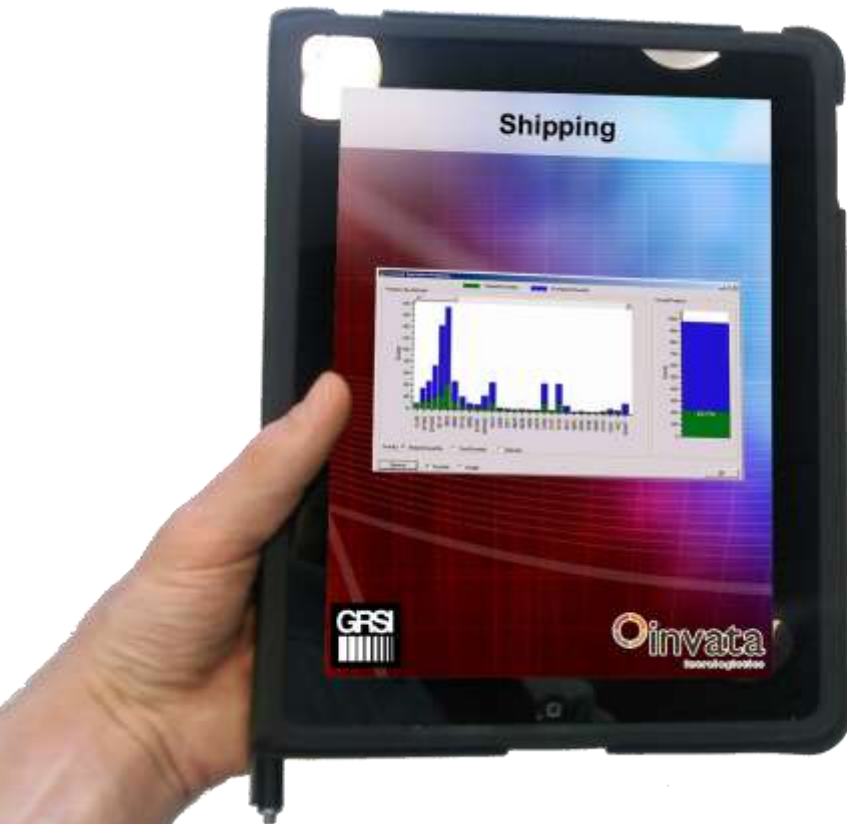


# Dashboards

- Graphic representation of pending versus processed work load
- Allocate work by dragging and dropping tasks to different resources



# Mobile applications



**FastTrak® WM+ – Integration made easy™**

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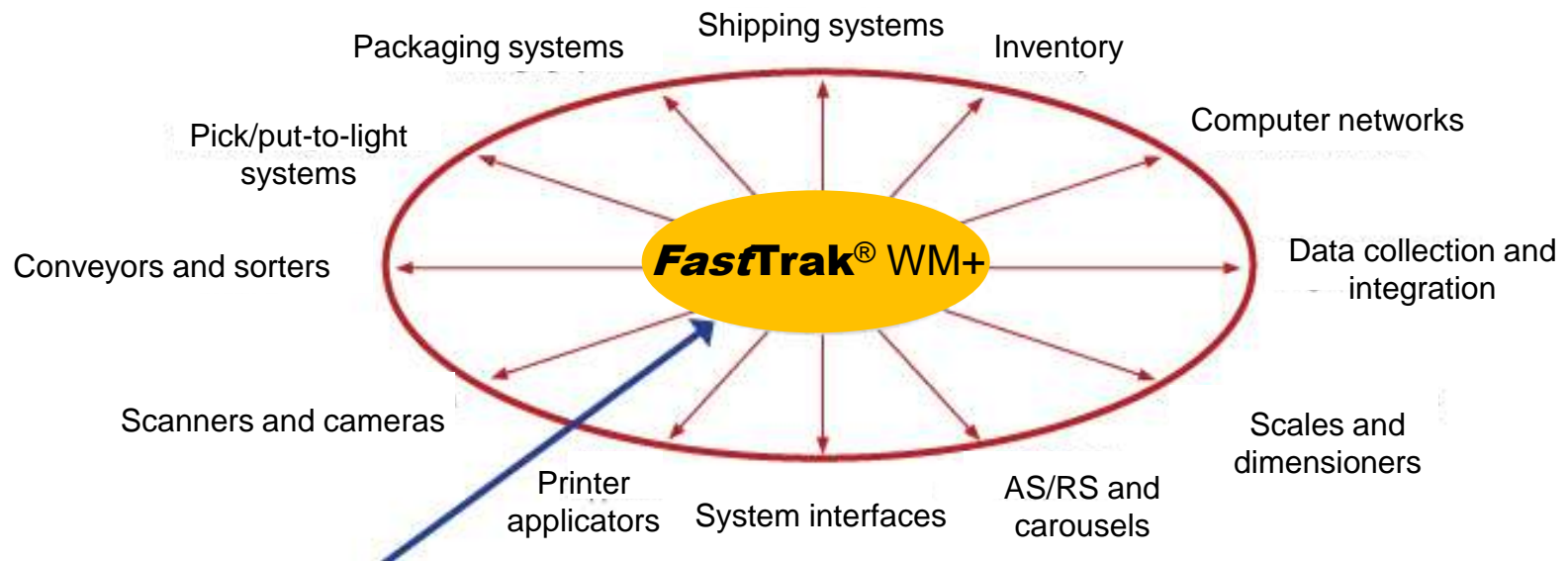
# Reporting tools

- Where is it and where has it been by order and carton
- Operator productivity, area performance
- Completed and pending workload by area, facility
- WM+ inventory
- Comprehensive reporting database – ongoing dynamic reporting tools

	A	B	C	E	F	G	H	I	J
1	<b>FastTrak® 3.0</b>								
2									
3	<b>Inputs:</b>								
4	Site ID:	2594							
5	Sort:								
6	Status:	Closed							
7	Cntr ID:								
8	Presort:								
9	Shipper:								
10									
11	<b>Package Inventory Report</b>								
12									
13				<b>Sort</b>	<b>Status</b>	<b>Container ID</b>	<b>Top-Level Container ID</b>	<b>Date Last Changed</b>	
14				GJ CHI90	Closed	606046607133270137234198	2594PORD30662D	Jun 12 2009 4:42PM	
15				GJ CHI59	Closed	602016607133270137228798	2594PORD306654	Jun 12 2009 4:42PM	
16				GJ CHI90	Closed	606046607133270137234198	2594PORD30662D	Jun 12 2009 4:42PM	
17				GJ CHI31	Closed	600916607133270137182358	2594PORD30662D	Jun 12 2009 4:42PM	
18				GJ CHI79	Closed	605056607133270137299388	2594PORD30662D	Jun 12 2009 4:42PM	
19				GJ CHI59	Closed	602016607133270137228798	2594PORD306654	Jun 12 2009 4:42PM	
20				GJ CHI4	Closed	600106607133270137175818	2594PORD306665	Jun 12 2009 4:42PM	
21				GJ CHI43	Closed	601376607133270137213078	2594PORD306654	Jun 12 2009 4:42PM	
22				GJ CHI59	Closed	602016607133270137228798	2594PORD306654	Jun 12 2009 4:42PM	
23				GJCHI133	Closed	601106607133270137312748	2594PORD306654	Jun 12 2009 4:42PM	
24				GJ CHI77	Closed	604776607133270137287358	2594PORD30662D	Jun 12 2009 4:42PM	
25				GJ CHI25	Closed	600686607133270137167358	2594PORD30662D	Jun 12 2009 4:42PM	
26				GJ CHI6	Closed	600146607133270137159588	2594PORD306665	Jun 12 2009 4:42PM	
27				GJCHI143	Closed	604466607133270137307688	2594PORD306654	Jun 12 2009 4:42PM	
28				GJ CHI79	Closed	605056607133270137299388	2594PORD30662D	Jun 12 2009 4:42PM	
29				GJCHI148	Closed	605276607133270137212768	2594PORD306646	Jun 12 2009 4:42PM	
30				GJ CHI34	Closed	601016607133270137271368	2594PORD306654	Jun 12 2009 4:42PM	
31				GJ CHI11	Closed	600316607133270137166948	2594PORD30662D	Jun 12 2009 4:42PM	
32				GJCHI144	Closed	604666607133270137218628	2594PORD306665	Jun 12 2009 4:42PM	
33				GJ CHI69	Closed	604406607133270137183328	2594PORD306654	Jun 12 2009 4:42PM	



# Support



## GRSI 24x7x365 support

- Single-point of contact for support
- Rapid response
- Remote assistance
- Maximum up-time



# Questions and next steps

GRSI

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