

# Implementing Best in Class Practices

Achieving Transportation Excellence – *“Not just a vision or journey, but a necessary mission”*

Welcome

COMMScope®



# Agenda

About CommScope

Why SAP Transportation Management

Best Practices

Benefits

Q & A



# CommScope at a Glance

Markets Served

BROADBAND  
ENTERPRISE  
WIRELESS

Countries Served

100+

Patents

2700+

R&D

AVERAGE  
**\$100 Million**  
ANNUALLY

Revenue

**\$3 Billion+**

Employees

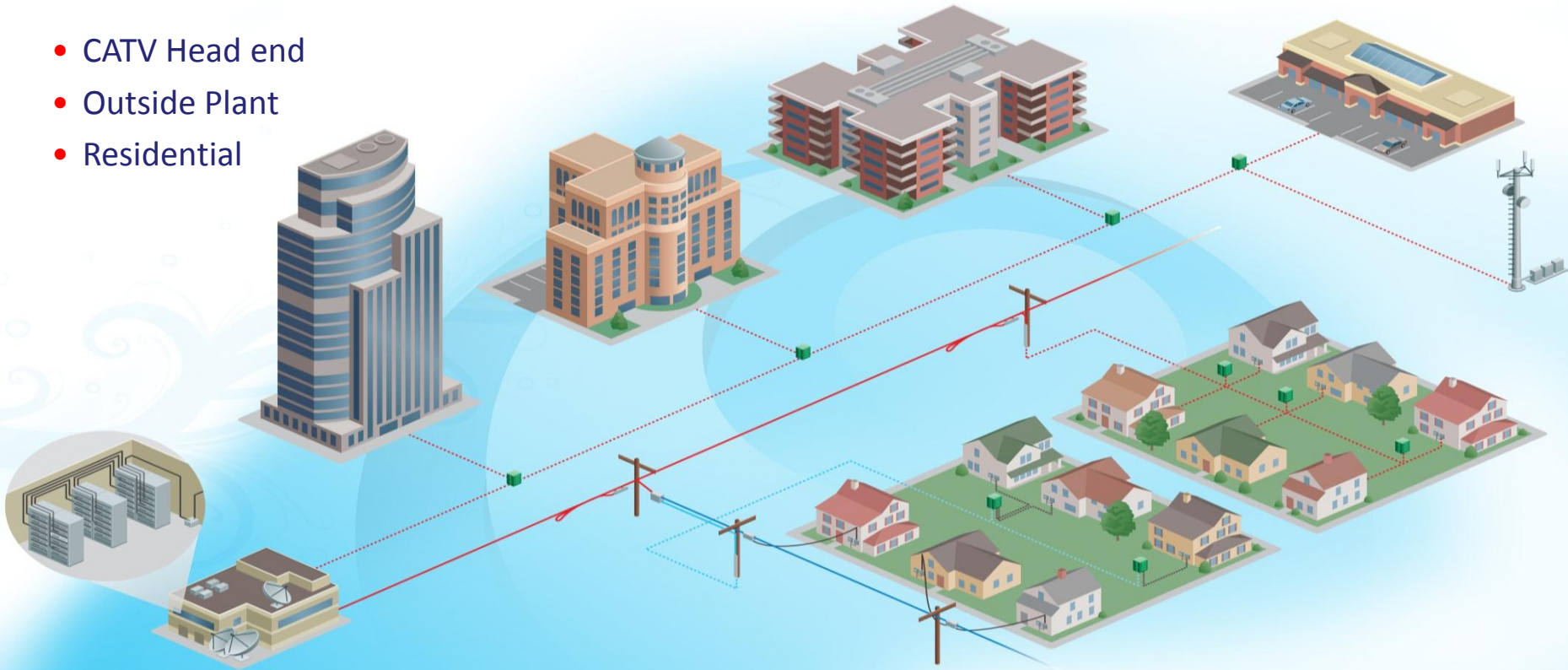
11,000+

Manufacturing Facilities

20+

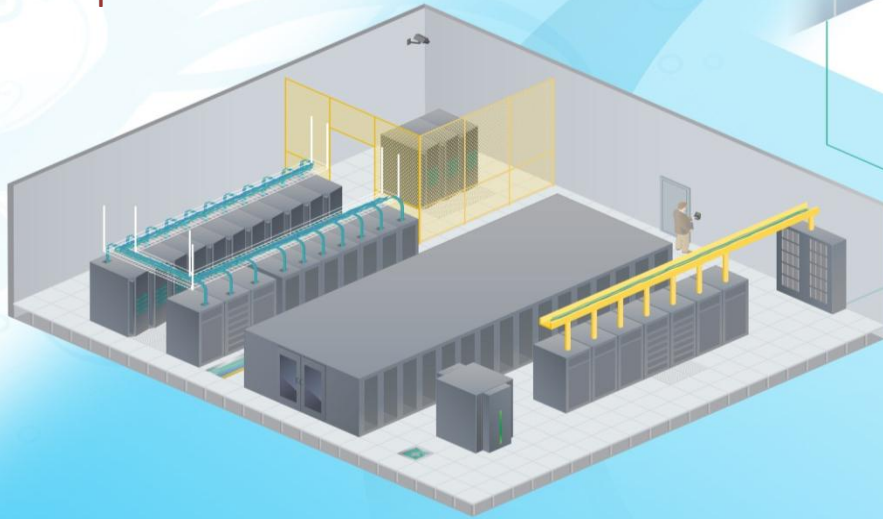
# Broadband Networks

- CATV Head end
- Outside Plant
- Residential



# Enterprise Networks

- Data Center
- In-Building Wireless
- Intelligent Building
- Campus



POWERED BY

**SYSTIMAX®**



# Wireless Networks

- Outdoor Macro Sites
- Distributed Coverage and Capacity
- Backhaul
- Small Cells



POWERED BY



# Global Footprint Demands Global Reach



Operating in nearly 20 countries  
More than 35 Shipping/Receiving Nodes  
Operating three major business units  
Wide variety of product sizes and shapes  
Combination of Make to Order & Stock  
Delivery to warehouses, distributors, job sites, etc.



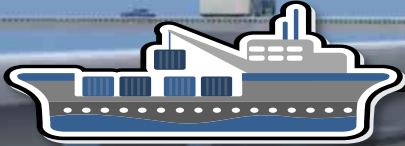
# Modes of Transport (by volume)



Shipping ~13% Air Freight



Shipping ~2% Freight Train



Shipping ~35% Cargo Ship



Shipping ~45% by Semi truck (LTL & TL)



Shipping ~5% Parcel Delivery



# Challenges Meant Status Quo - Not an Option

Missing The Basics (Logistics 101)

Difficult to scale



Lacking Competitive Advantage (Servicing Customers)

Silos (Lacking Global Platform)



Missed Opportunities \$ (Savings)

Disparate Systems  
(Lacking Global Platform)



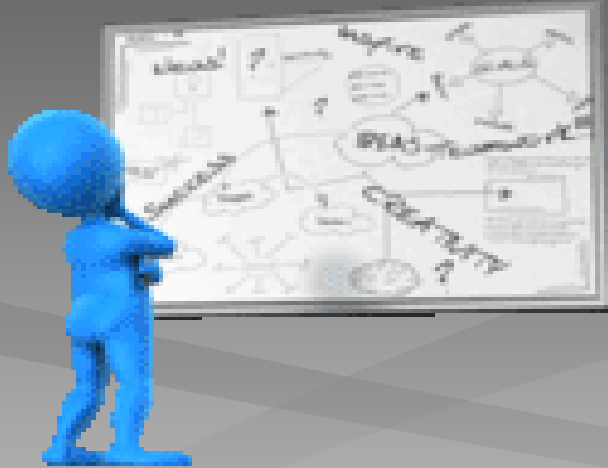
Unattainable Vision (Mission)

Daily Fire Fight

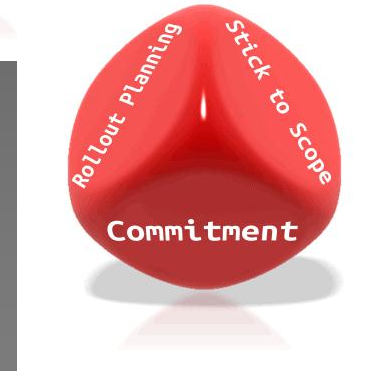
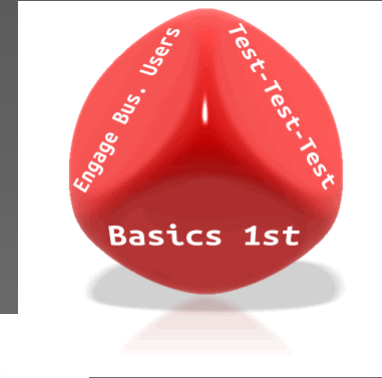
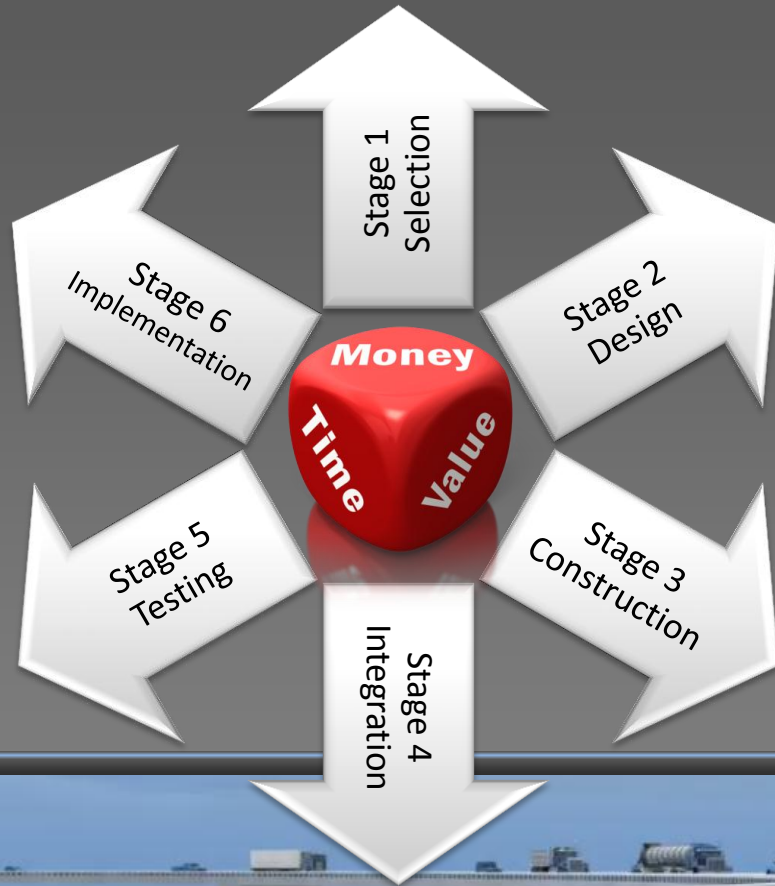


# Why SAP Transportation Management?

- ✓ Eliminate Disparate non-Global Systems (FCX, ADSI/PT, Connect Ship)
- ✓ Support All Transport Modes Globally
- ✓ Better Reporting & Analytics
- ✓ Capitalize on Consolidation Opportunities
- ✓ Ability to Build Complex Routes
- ✓ TMS Will Generate Tremendous ROI



# Project Approach Recommendations



# Optimized Load Plan - 565 Freight Units to 83 Freight Orders

## Transportation Cockpit: Optimizer Result, CLM Layout

✓ Accept ✗ Cancel Optimizer Explanation

- ✓ Process 2 request(s) with strategy ZDDO\_DET\_S
- ✓ Optimizer considers incompatibilities
- ✓ In total 2 freight units cannot be delivered at all
- ✓ Data logging for optimizer explanation tool is active
- ✓ 562 of 564 freight units can be delivered

Display Message Log

### Freight Unit Stages

View: Standard View		Split/Merge		Stages		Create Freight Document		Remove Assignment						
D...	...	Pro...	Current Promi...	Customer ...	Pla...	Ex...	Items	S...	...	Original Order	Cons...	Cou...	Gross Wei...	Unloadi...
		7...	PAR...	04/02/2014	03/11/2014	✓	\$57	01	P	3071905	1571	US TX	1.800	000000
			CAB...	05/06/2014	04/24/2014	✓	\$63	01	P	3072724	1877	US TX	13.200	000000
				05/27/2014	05/16/2014	✓	\$4	01	P	3073360	1881	US IL	1,042.000	000000
				05/27/2014	05/16/2014	✓	\$4	01	P	3073360	1881	US IL	1,042.000	000000
				05/27/2014	05/16/2014	✓	\$74	01	P	3073361	1892	US TN	1,042.000	000000
				05/27/2014	05/16/2014	✓	\$74	01	P	3073361	1892	US TN	1,042.000	000000
				05/27/2014	05/16/2014	✓	\$74	01	P	3073361	1892	US TN	1,042.000	000000
		7...	PAR...	03/25/2014	03/05/2014	✓	\$55	01	P	3047283	1898	US NV	25.000	000000
				05/27/2014	05/13/2014	✓	\$46	01	P	3073358	1898	US NV	1,042.000	000000
				05/27/2014	05/13/2014	✓	\$46	01	P	3073358	1898	US NV	1,042.000	000000
				05/09/2014	05/07/2014	✓	\$7	02	P	3073149	1908	US UT	1.025	000000
				05/12/2014	05/07/2014	✓	\$5	09	P	3073174	1910	US OR	210.250	000000
				05/12/2014	05/07/2014	✓	\$5	09	P	3073178	1910	US OR	7.250	000000
				04/28/2014	04/21/2014	✓	\$16	01	P	3072499	2009	US IL	10,087.000	000000
			CAB...	06/10/2014	05/21/2014	✓	\$72	01	P	3073490	2009	US IL	1.550	000000
				05/28/2014	05/23/2014	✓	\$18	01	P	3330041286	2009	US IL	1,042.000	000000

### Freight Orders/Freight Bookings

New	Remove Vehicle	Check	Fix	Unfix	Scheduling	Carrier Selection	Tendering	Calculate Charges		
Created	Fixing	Vehicle	Document	Net Wei...	Means of Tr...	Carrier	Maxim...	Sta...	Source Loc...	Destina...
		LTL_HI	\$70	173.952	ZLTL_HI		1%		US03_SHP	44
		ROAD_P...	\$71	51.850	ZPARCEL		35%		US03_SHP	53
		ROAD_P...	\$72	1.550	ZPARCEL		1%		US03_SHP	0000000
		LTL_SE	\$73	1,005.000	ZLTL_SE		5%		US03_SHP	0000015
		LTL_SE	\$74	3,126.000	ZLTL_SE		16%		US03_SHP	0000000
		LTL_SE	\$75	2,084.000	ZLTL_SE		10%		US03_SHP	0000000
		LTL_SE	\$76	426.000	ZLTL_SE		2%		US03_SHP	10
		LTL_SE	\$77	873.800	ZLTL_SE		4%		US03_SHP	0000000
		LTL_SE	\$78	1,042.000	ZLTL_SE		5%		US03_SHP	0000000
		LTL_SE	\$79	1,042.000	ZLTL_SE		5%		US03_SHP	51
		LTL_NE	\$80	1,110.000	ZLTL_NE		6%		US03_SHP	0000000
		LTL_NE	\$81	19,652.000	ZLTL_NE		98%		US03_SHP	0000000
		LTL_NE	\$82	735.000	ZLTL_NE		4%		US03_SHP	0000000
		LTL_MW	\$83	224.000	ZLTL_MW		1%		US03_SHP	0000000

### Vehicles

Insert	Create Freight Document		
Resource	Description	Means of Transport	Max. Weight
AIR_HEAVYWEIGHT		ZAIRHEAVY	9,999.000 LI
AIR_PARCEL		ZAIRPARCEL	150.000 LI
LTL_AK		ZLTL_AK	19,999.000 LI
LTL_ATL		ZLTL_ATL	19,999.000 LI
LTL_HI		ZLTL_HI	19,999.000 LI
LTL_MW		ZLTL_MW	19,999.000 LI

### Overview

Details	Maximum Utilization	Document Number
Active Vehicle LTL_MW		LTL_MW
US03_SHP (3642 US Hwy 70 East / Claremont NC 28610)	1%	
Load Manufacturing DTR Type 3200001663 (Outbound Delivery 85864040)		
Load Manufacturing DTR Type 3200001664 (Outbound Delivery 85864041)		
0000003912 (11614 S AUSTIN AVE / ALSIP IL 60803)	0%	
Unload Manufacturing DTR Type 3200001663 (Outbound Delivery 85864040)		
Unload Manufacturing DTR Type 3200001664 (Outbound Delivery 85864041)		

# Optimized Load Plan in < 120 seconds on our test box

## Business Rule Framework plus

Workbench Tools

Icons and Help

Repository Catalog

Show: Favorites Search

Icons and Navigation

Favorites Tra... St...

Determine Collect Carrier

ZCOLLECT\_ROUTING\_GUIDE

### Decision Table: DT\_DETERMINE\_COLLECT\_CARRIER, Determine Collect Carrier

Back Edit Check Save Activate Transport Delete More

#### General

#### Detail

Export To Excel Context Overview Start Simulation

#### Table Contents

Find: Next Previous

Table Settings

	#	TOR Source Location	Consignee ID	TO Mode of Transport	Service Level Code o	Destination Country	Destination Region	TO Total Cargo Weigh	Carrier
	1	US03_SHP	0000014200	01 (Ground)	F1 (IntFreight Forwarder)	MX (Mexico)		[50 LB.. 10,000 LB]	100085CA
	2	US03_SHP	0000014200	01 (Ground)	F1 (IntFreight Forwarder)	MX (Mexico)		>10,000 LB	100391CA
	3	US03_SHP	0000014200	01 (Ground)	F1 (IntFreight Forwarder)	MX (Mexico)		<50 LB	100135CA
	4	US03_SHP	0000003018	01 (Ground)	F1 (IntFreight Forwarder)	PR (Puerto Rico)		[0 LB..65 LB]	100390CA
	5	US03_SHP	0000003018	01 (Ground)	F1 (IntFreight Forwarder)	PR (Puerto Rico)		>65 LB	100085CA
	6	US03_SHP	0000928011	03 (Ocean)	OC (Ocean)	BR (Brazil)	SP (Sao Paulo)	<=45,000 LB	100136CA
	7	US03_SHP	0000928011	02 (Air)	80 (International Air)	BR (Brazil)	SP (Sao Paulo)	[101 LB.. 45,000 LB]	100136CA
	8	US03_SHP	0000928011	02 (Air)	80 (International Air)	BR (Brazil)	SP (Sao Paulo)	<101 LB	100390CA
	9	US03_SHP	0000911143	03 (Ocean)	OC (Ocean)	SG (Singapore)	SG (St. Gallen)	<=45,000 LB	100136CA
	10	US03_SHP	0000911143	02 (Air)	80 (International Air)	SG (Singapore)	SG (St. Gallen)	[101 LB.. 45,000 LB]	100494CA
	11	US03_SHP	0000911143	02 (Air)	80 (International Air)	SG (Singapore)	SG (St. Gallen)	<101 LB	100390CA
	12	US03_SHP	0000921011	03 (Ocean)	OC (Ocean)	AR (Argentina)	01 (Buenos Aires)	<=45,000 LB	100136CA
	13	US03_SHP	0000921011	02 (Air)	80 (International Air)	AR (Argentina)	01 (Buenos Aires)	[101 LB.. 45,000 LB]	100494CA
	14	US03_SHP	0000921011	02 (Air)	80 (International Air)	AR (Argentina)	01 (Buenos Aires)	<101 LB	100390CA
	15	US03_SHP	0000941123	03 (Ocean)	OC (Ocean)	NL (Netherlands)		<=45,000 LB	100136CA





# Our Journey

Q4 2013  
SAP Global  
Trade Services  
Completed

Q4 2013  
SAP TM Design  
Phase  
Complete

Q1 2014  
SAP TM  
Build Phase

Q2 2014  
SAP TM  
Testing

Q3 2014  
NA Go Live





**2016 APAC**

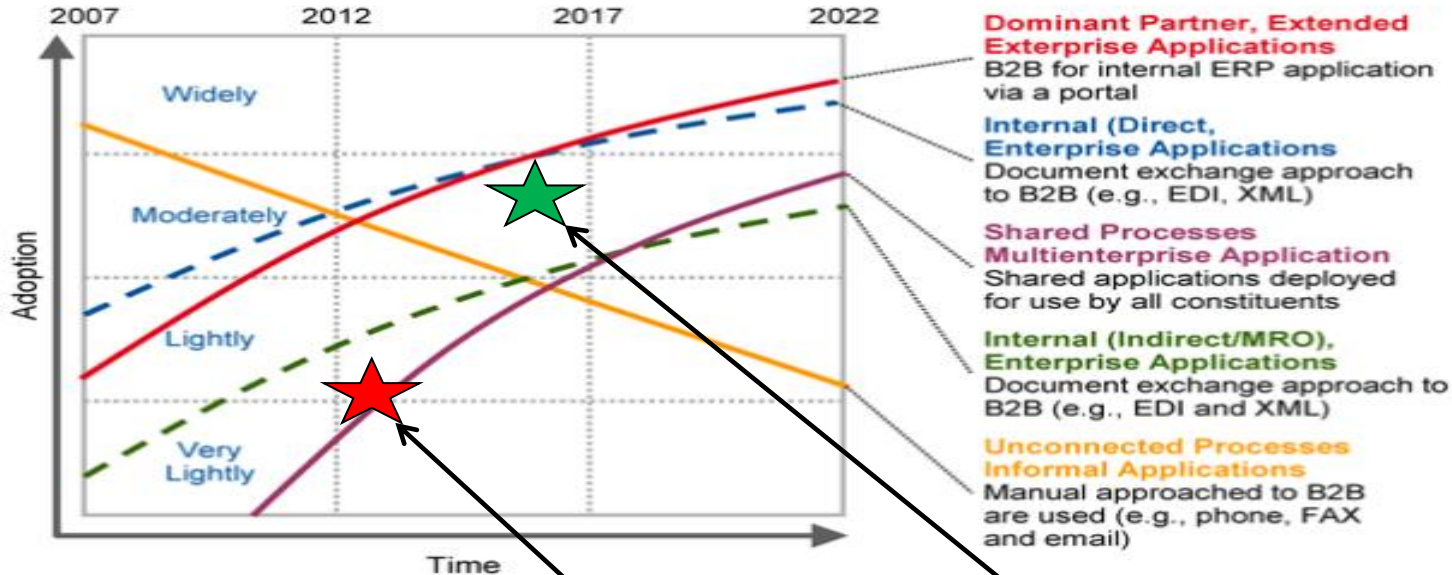
**2015 EMEA**

**2014  
NA Rollout**

# Technology Adoption Evolution: Future State

## Gartner Group Evolution of Technology Adoption

**Figure 2.** How Adoption Rates for Multienterprise Technologies Change Over Time



Source: Gartner (June 2012)

CommScope  
2013

CommScope  
2015



**Optimized  
Transportation  
Next Exit**

**Thank You  
Q & A**

