

Improve Contract Manufacturing Partnerships by Ensuring Consensus Through Globalized Change Processes

Joseph Barrows Manager, Configuration and Data Management

April 14, 2008

Legal Disclaimer

- All or some of the products detailed in this presentation may still be under development and certain specifications, including but not limited to, release dates, prices, and product features, may change. The products may not function as intended and a production version of the products may never be released. Even if a production version is released, it may be materially different from the pre-release version discussed in this presentation.
- NOTHING IN THIS PRESENTATION SHALL BE DEEMED TO CREATE A WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT OF THIRD PARTY RIGHTS WITH RESPECT TO ANY PRODUCTS AND SERVICES REFERENCED HEREIN.
- Brocade, Fabric OS, File Lifecycle Manager, MyView, and StorageX are registered trademarks and the Brocade B-wing symbol, DCX, and SAN Health are trademarks of Brocade Communications Systems, Inc., in the United States and/or in other countries. All other brands, products, or service names are or may be trademarks or service marks of, and are used to identify, products or services of their respective owners.



Brocade





3

March 2008

Brocade Corporate Overview

© 2008 Brocade Communications Systems, Inc. All rights reserved.

Brocade Overview

- Brocade is a leading provider of data center networking solutions that help organizations connect, share, and manage their information. Organizations that use Brocade products and services are better able to optimize their IT infrastructures and ensure compliant data management.
 - Founded: 1995
 - Incorporated: 1999, Delaware
 - IPO: 1999 (NASDAQ: BRCD)
 - Headquarters: San Jose, Geneva, Singapore
 - Approximately 2400 employees worldwide
 - Revenues of \$1.24B in FY '07
 - Acquisitions: Strategic Business Systems, McDATA, Silverback Systems, NuView



Brocade Overview

- Global Offices

- Americas: Brazil, Canada, Mexico, and the U.S.
- APAC: Australia, China, Taiwan, India, Japan, Korea, and
- Singapore
- EMEA: Austria, Belgium, Denmark, Dubai, France, Germany, Holland, Italy, Spain, Switzerland, and the U.K.

– R&D Centers

- Americas: Colorado, Minnesota and Oregon
- APAC: Bangalore, India and Shenzhen, China



Four Divisions Focused on Growth

• Data Center Infrastructure Division:

 This division focuses on the Brocade Data Center Fabric (DCF) architecture, a framework for designing, building, and managing next-generation data centers. The division's products help organizations simplify connectivity, optimize performance, and reduce cost as part of a single, converged data center infrastructure.

• Files Division:

 This division develops products for file-based applications, databases, documents, images, and multimedia—driving enterprise file consolidation, transparent file mobility, replication, and access security.

• Server Division:

 This division develops products that provide new server connectivity options through unmatched hardware capabilities along with unique software configurability. As a result, IT organizations can implement end-to-end management across next-generation data centers based on the Brocade DCF architecture.

• Services, Support, and Solutions Division:

 Brocade develops industry-leading services, support, and solutions for servers, storage, applications, and data—helping organizations scale effectively, improve performance, and connect applications throughout enterprise data centers.



March 2008

The World's Most Demanding Customers Rely on Brocade Solutions



90+% of Automobile and Parts Manufacturers, including the Top 10



90+% of Commercial and Investment banks, including the Top 10



90+% of Chemical Companies, including the Top 10



90+% of Electronics and Electrical Manufacturers, including the Top 10



90+% of Healthcare and Pharmaceutical Companies, including the Top 10



90+% of Industrial and Farm Equipment Manufacturers, including the Top 10



90+% of Energy, Petroleum, and Mining Firms, including the Top 10



90+% of Telecom Providers and Suppliers, including the Top 10

Source – percentages estimated based on Global 2000 companies

© 2008 Brocade Communications Systems, Inc. All rights reserved.



A Strong Partner Ecosystem and Growth

- Brocade continues to participate in high-growth market segments for data center environments
- The Brocade business strategy and initiatives are aligned to key customer requirements and business challenges
- Brocade has strategic partnerships with the industry's foremost IT companies

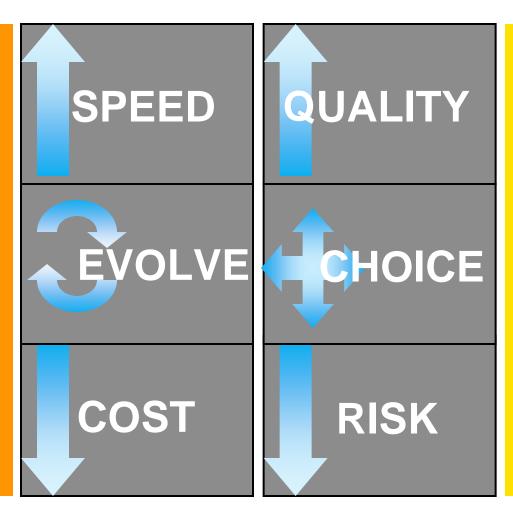




© 2008 Brocade Communications Systems, Inc. All rights reserved.

Brocade Is Committed to Customer Satisfaction

- Innovation and delivery
- Technology and performance leadership
- Future-built, interoperable
- No "rip-andreplace" approach
- Optimized capital resources
- Minimized operational costs



- Empirical evidence

 quantified
- Most extensive testing and qualification
- Services wherever and whenever needed
- Best-in-class solutions
- Investment protection and extension
- Expertise that minimizes cost, risk, and disruption

© 2008 Brocade Communications Systems, Inc. All rights reserved.



Brocade Partners with the World's Leading Technology Companies

OEM Partners



Solution Partners



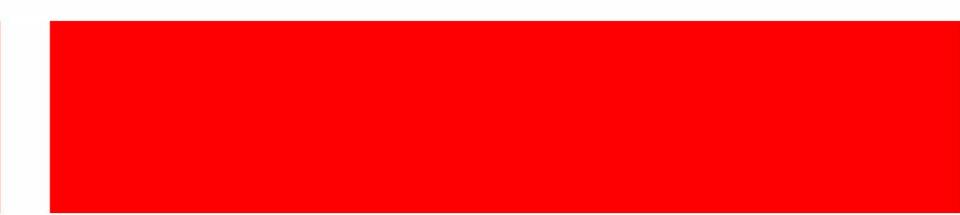
© 2008 Brocade Communications Systems, Inc. All rights reserved.







Implementing a global collaborative change process outside the four walls



Challenges in moving Manufacturing outside the four Walls

- Security
- Proper notification by product impact
 - Limited visibility
- Understand implementation intent
 - Understanding of individual CM process requirements
- As designed vs. As built
 - Agile "as designed" -> CM at a different level

© 2008 Brocade Communications Systems, Inc. All rights reserved.

March 2008

Brocade's Challenges

- OEM Partners had zero visibility on "change" implementation
- No way of identifying or tracking "Cost of Change"
 At the mercy of your Contract Manufacturer
- CM expected to build to "As designed" drove Deviations
- Difficult to determine configuration of units





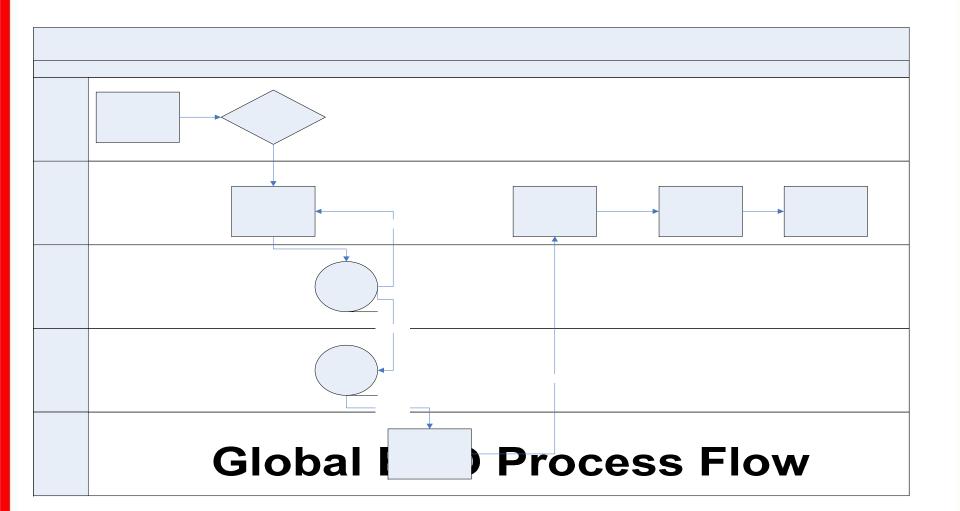
BROCADE



Streamlining product record change processes while incurring substantial growth through Acquisition



Streamline the processes



March 2008

Brocade Corporate Overview



 $\ensuremath{\mathbb{C}}$ 2008 Brocade Communications Systems, Inc. All rights reserved.

15

 \geq





Gaining visibility on cost containment that is beyond your control



Gaining visibility on cost

- Global understanding of Disposition terms
 - Rework, Scrap, Use 'as is'
- Impact to individual Bill of Material structures
 - Effectivity date planning
- Information sharing on MPS vs. Inventory and WIP
 - Lead time, Purchase Orders, Finished Goods Inv.
- External customer expectations
 - Customized implementation per customer



The CM representative will have rights to edit the Cover Page tab Page Three section for Implementation Plan which is where the overall effectivity plan will be tracked and estimated cost of rework, scrap and new tooling based on change dispositons.





Affected items tab

aarch Re	veulte b	Ba Sustaining ECO: E11	ck Refresh Ho	re Create Search	V Search	Advanced Las	t Tools			? ~ Неір
Sus Prod Upda No C	stain luct Affe te Dell D chang	ected: 4920 DL units with FOS 5.3. ges are required in Reyect Q Con	762 .0a. accessory kit.					🤏 Per	nding Impla	entationen en la constantia en la constanti En la constantia en la cons En la constantia en la cons En la constantia en la const
0 Edit	\times _{BRE}	anacoves 👘 Ackl 💌	Buille Choneger*				Select	ed: 0 of 17	∢ Page: 1 🛩 of	1 🕨 🕅
	0 🚜	Item Type	Item Category	Part Number A	Description	Old Lifecycle Phase	Old Rev	Obsolete Date	New Rev	Effective Date
2	4	51-Program File	e Software	51-1000190-02	PGM,CSD,4900,DL	Production	A	11/30/2007 12:00:00 AM PST	В	11/30/2007 12:00:00 AM PST
2	9 🐇	51-Program File	Software	51-1000190-03	PGM,CSD,4900,FOS 5.3.0A,DL				A	11/30/2007 12:00:00 AM PST
2	-	53-Printed Material	Guide	53-1000553-01	GDE,INST,ISL TRUNKING,4900,DL	Production	A	11/30/2007 12:00:00 AM PST	в	11/30/2007 12:00:00 AM PST
2 (1 🐇	53-Printed Material	Guide	53-1000553-02	GDE, INST, ISL TRUNKING, 4900, DL				А	11/30/2007 12:00:00 Ar PST
2	-	80-Top Mfg	Software	80-1000707-01	S/W,ISL TRUNKING,4900,PP,DL	Production	A	11/30/2007 12:00:00 AM PST	в	11/30/2007 12:00:00 AM PST
120	-	80-Top Mfg	Software	80-1000707-02	S/W,ISL TRUNKING,4900,PP,DL				A	11/30/2007 12:00:00 Af PST
2	*	80-Top Mfg	Assy,Top	80-1000708-02	SW4920, 32PORT, 2P/S, 3 FAN, 32 SFPS,DL	Production	А	11/30/2007 12:00:00 AM PST	в	11/30/2007 12:00:00 AM PST
150	<u>#</u>	80-Top Mfg	Assy,Top	80-1000708-03	SW4920, 32PORT, 2P/S, 3 FAN, 32 SFPS, <mark>D</mark> L				А	11/30/2007 12:00:00 AF PST
2	*	80-Top Mfg	Assy,Top	80-1000709-02	SW4920, 32PORT, 2P/S, 3 FAN, 32 SFPS,DL	Production	А	11/30/2007 12:00:00 AM PST	в	11/30/2007 12:00:00 AM
	*	80-Top Mfg	Assy,Top	80-1000709-03	SW4920, 32PORT, 2P/S, 3 FAN, 32 SFPS,DL				A	11/30/2007 12:00:00 AM PST
2	*	80-Top Mfg	Assy,Top	80-1000711-02	FRU, SW4920, 32PORT, 2P/S, 3 FAN, NO SFPS, DL	Production	А	11/30/2007 12:00:00 AM PST	в	11/30/2007 12:00:00 AM PST
120	-	80-Top Mfg	Assy,Top	80-1000711-03	FRU, SW4920, 32PORT, 2P/S, 3 FAN, NO SFPS, DL				A	11/30/2007 12:00:00 AI PST
2	1 🐇	CSD-Customer Specification Document	Controlled Documents	CSD-00334-01	CSD, SW4900, DL	Production	D	11/30/2007 12:00:00 AM PST	E	11/30/2007 12:00:00 AM
	#	Assy Top Mktg	Top Marketing Assembly	DL-4920-0001	SW4920, 32PORT, 2P/S, 3 FAN, 32 SFPS.DL	Production	в	11/30/2007 12:00:00 AM	С	11/30/2007 12:00:00 At
Your oor		50 2						ы	A Dagos I a Sal of	r h. hl
								5		Local intranet

© 2008 Brocade Communications Systems, Inc. All rights reserved.



Affected items tab cont'

	s are required in Co		t Status Action	s *						
er Page Af	fected Items w	Orkflow Attach	ments History				s	elected: 0 of 17	K 4 Page: 1 P of	11
ifecycle Phase	Change Level	On Order	Stock	WIP	FGI	Distribution	Hubs	Field Units	ServiceReturn	Note
uperceded	Non- Interchangeable	Rework	Use As Is	Rework						
oduction	Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	
perceded	Non- Interchangeable	Rework	Use As Is	Rework						
oduction	Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	
perceded	Non- Interchangeable	Rework	Use As Is	Rework						
oduction	Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	
perceded	Non- Interchangeable	Rework	Use As Is	Rework	Rework to 5.3.0a					
oduction	Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	
perceded	Non- Interchangeable	Rework	Use As Is	Rework	Rework b 5.3.0a					
oduction	Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	
perceded	Non- Interchangeable	Rework	Use As Is	Rework	Rework to 5.3.0a					
oduction	Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	Initial Release	
duction	Documentation Only	Documentation	Documentation							
oduction	Non- Interchangeable	Rework	Use As Is	Rework	Rework to 5.3.0a					
oduction	Non-	Rework	Use As Is	Rework	Rework to					

March 2008

© 2008 Brocade Communications Systems, Inc. All rights reserved.

20

2"

2"

.25"

Implementation Planning

Product Affected: 4920 DL Update Dell units with FOS 5.3.0a. No CD changes are required in accessory kit.	Sending Implementatio
Approve Kacing Q Comment * Next Status Actions *	
Cover Page Affected Items Workflow	
Ø Edit	
CHANGE	IMPLEMENTATION COST OF CHANGE
Change Type: Sustaining ECO	
Number: E11762	
Product Line: SW4900	
Change Category: Normal	
Reason Code: Customer Request-Dell	
Description of Change: Product Affected: 4920 DL Update Dell units with FOS 5.3.0a. No CD changes are required in accessory kit.	
Reason For Change: Dell have requested their units be updated with	FOS 5.3.0a.
Originator: Stewart, John	
Change Analyst: Bosman, Sharon	
Date Originated: 10/19/2007 12:37:34 PM PDT	
Date Released: 11/30/2007 10:31:04 AM PST	
Final Complete Date:	
Status: Pending Implementation	
Workflow: Brocade Global Sustaining WF	
Status	AT1
Date to CCB: 10/24/2007 12:00:00 AM PDT	
Referenced ECR/Purge number: None	
Page Three	
CHANGE IMPLEMENTATION	-T
Implementation Date Tracker:: 03/14/2008 12:00:00 AM PDT	
Implementation Plan: FAI date: 2 weeks from 12/14/07	
Estimate ship date for new rev. are listed be DL-4920-0001 FGI gtv. 9 - 3/14/2008	ow:
DL-4920-0002 FGI qty. 14 - 3/14/2008	
XDL-4920-0000 FGI qty. 0 - 12/14/07	
Pre-Req ECO(s): Concurrent ECOs:	
	^T
COST OF CHANGE	
Estimated Rework Cost: \$0	
Estimated Scrap Cost: \$0	
Estimated Tooling Cost: \$0	
Estimated Cost of ECO: \$0	
Actual Rework Cost:	



Cost of Change

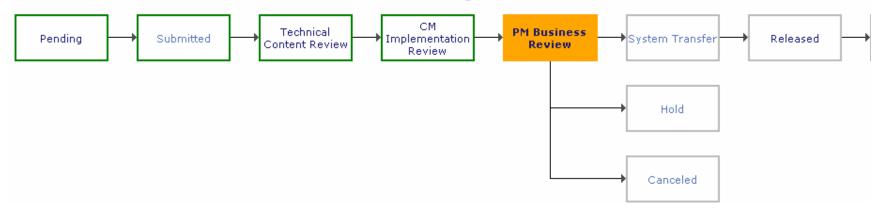
Cover Page Affected Items Work		
over Page 1 Anected Items 1 Work	flow / @ Attachments / History	
0 Edit		
	CHANGE IMPLEMENTATION COST OF CHANGE	
Change Turner	Sustaining ECO	
Number:		
Product Line:		
Change Category:		
	Customer Request-Dell	
	Product Affected: 4920 DL Update Dell units with FOS 5.3.0a. No CD changes are required in accessory kit.	
Reason For Change:	Dell have requested their units be updated with FOS 5.3.0a.	
Originator:	Stewart, John	
Change Analyst:	Bosman, Sharon	
Date Originated:	10/19/2007 12:37:34 PM PDT	
	11/30/2007 10:31:04 AM PST	
Final Complete Date:		
	Pending Implementation	
Workflow:	Brocade Global Sustaining WF	
Status		- T -
Date to CC8:	10/24/2007 12:00:00 AM PDT	
Referenced ECR/Purge number:	None	
Page Three		A T
		÷Т
CHANGE IMPLEMENTATIO		
	er:: 03/14/2008 12:00:00 AM PDT	
Implementation Pil	San: FAI date: 2 weeks from 12/14/07 Estimate ship date for new rev. are listed below: DL-4920-0001 FGI qty. 9 - 3/14/2008 DL-4920-0002 FGI qty. 14 - 3/14/2008 XDL-4920-00002 FGI qty. 0 - 12/14/07	
Pre-Reg ECO((s):	
Concurrent ECC	Os:	
COST OF CHANGE		^T
Estimated Rework Co	ost: \$0	
Estimated Scrap Co	ost: \$0	
Estimated Tooling Co	osti \$0	
Estimated Cost of EC	20: \$0	
Actual Rework Co	sat:	
Actual Scrap Co	sat:	
Actual Tooling Co	ost:	
Actual Cost of EC	CO: \$	
Accounting # of EC		

March 2008





Workflow Overview - Brocade Global Sustaining WF



- Once the ECO is approved by all of the CM Implementation Reviewers, the change will be promoted to the PM Business Review
- At this stage only the Product Program Manager will need to approve that based on the intent of the change, the affected items and the CM's implementation planning that it meets budget and design change intent to release
- Up to 3 business days can be used to complete review and update ECO





- Once Change Analyst has completed Business System set up for effectivity dates and item master changes, they will move the package to released
 - At this time all approvers and observers will be notified of the package release
- The ECO will stay at the Released Status until the final effectivity date has cut in on the ECO.
- The Change Analyst will continually monitor with the CM Partner to determine if dates need to be adjusted based on forecast/demand and inventory quantity







- Once the effectivity date has occurred and the change has phased into the manufacturer at the highest assembly level, the ECO will be moved to the implemented status, closing out the change process.
- All approvers and observers will be notified upon implementation of the change.





Benefits

- OEM partners now help drive implementation planning
- CM shares inventory positions
- Opens options to implementation planning/dispositions
- Identifies Cost Impact of Change
- Eliminates Deviations through Effectivity date control
- Configuration of units can be determined at any time





Questions?







THANK YOU