

Lightweight And Minimally-Invasive Concepts For Smarter Integration

Fred Stefan

Business Information Systems
University of Leipzig
Johannisgasse 26
D-04103 Leipzig, Germany

Tel.: +49 (0) 341 97 32272

Fax: +49 (0) 341 97 32329

Mob.: +49 (0) 151 15149808

<http://bis.informatik.uni-leipzig.de/FredStefan>
stefan@informatik.uni-leipzig.de

Agenda

1. Introduction
2. Empirical studies of the University of Leipzig
 - Which requirements lead to particular solutions?
 - Confirms the need for smarter integration
3. Lightweight integration concepts
4. Minimally-invasive integration concepts
5. Showcase
6. Conclusion

1. Introduction

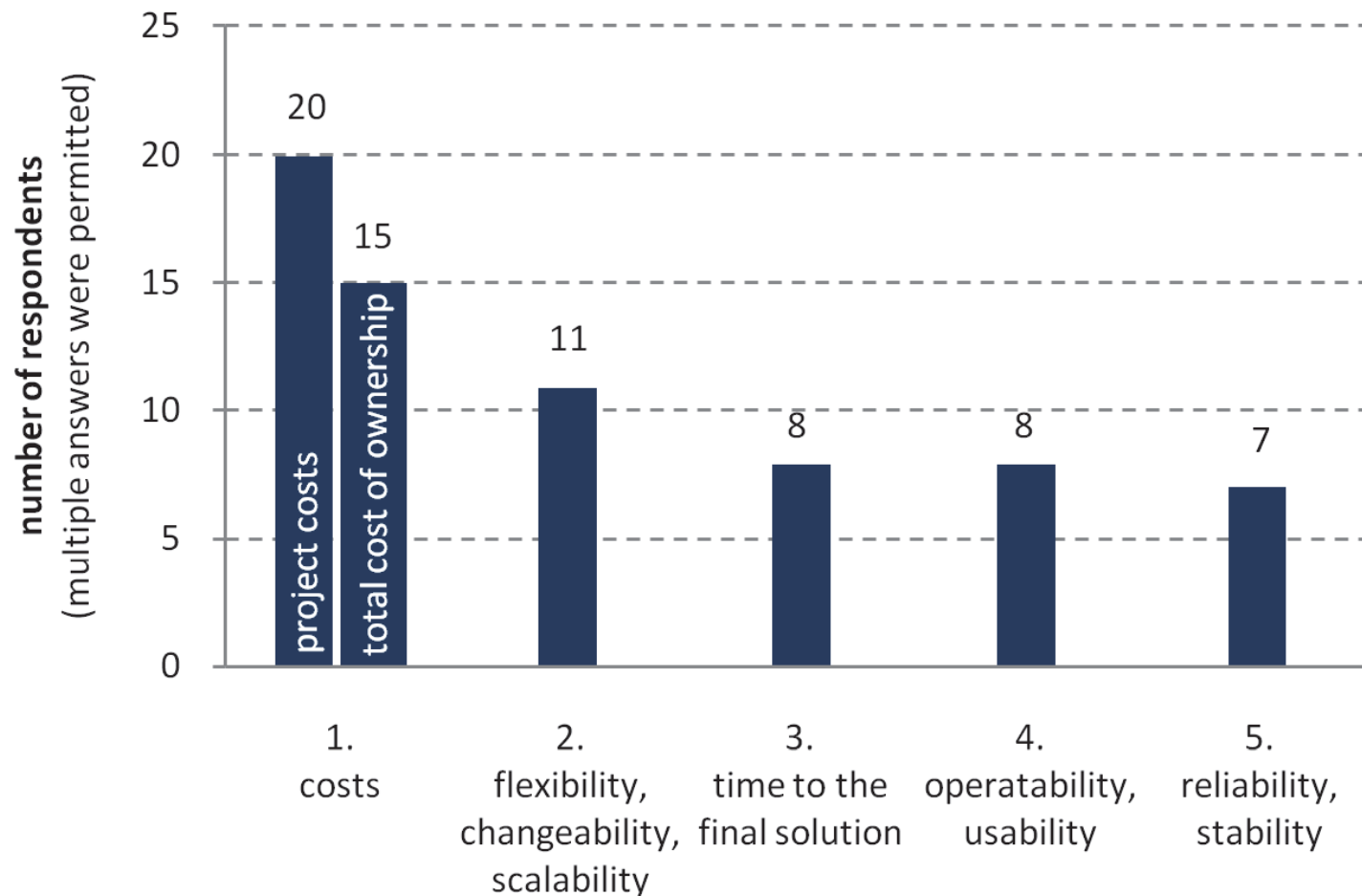
- Application Integration constitutes a large challenge
- impotent elements of a flexible information technology and essential for a flexible business concern
- technical, business and political challenges
- a multiplicity of process models exist
- not all are adequate for every integration problem

2. Empirical studies of the University of Leipzig

- **Aim:**
 - Which integration methods discussed within academia are used in practice?
 - How are integration services provided today?
- **Study design:**
 - conducted as expert interviews among 30 integration service providers
 - six sections: demographic base data, understanding of integration, integration tools and instruments, integration patterns and automation, weightiness and invasiveness, the integration object mainframe
 - 52 hours of audio material was transcribed, extracted and condensed, following research methods from social sciences

2. Empirical studies of the University of Leipzig

- Top 5 integration providers client's decision criteria when deciding for an integration solution

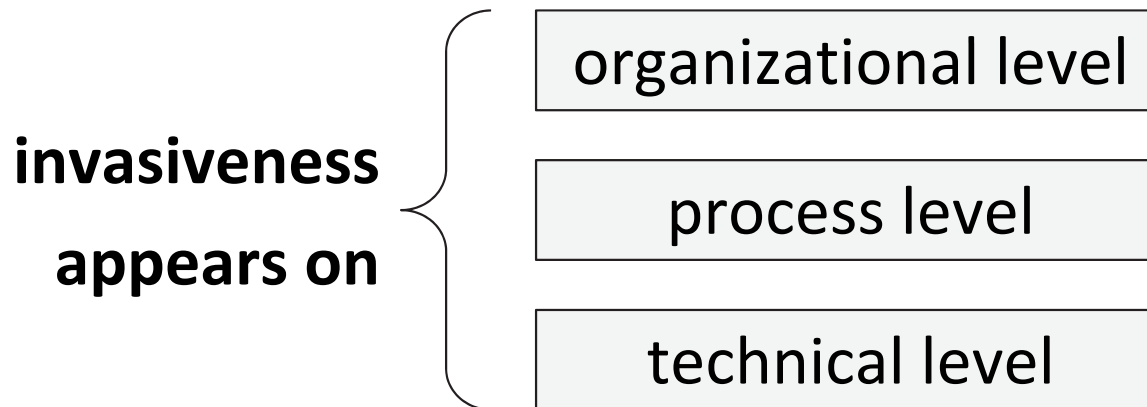


3. Lightweight integration concepts

- The weightiness of integration is determined by the applied approach.
- Characteristics of lightweight integration:
 - Iterative and incremental development
 - Prototyping
 - Limited problem space
 - Reduction of recurring planning expenditure
- Important point:
 - Problem adequateness of the integration solution
 - “You don't need a sledgehammer to crack a nut!”

4. Minimally-invasive integration concepts

- originates from surgery: minimal invasiveness indicates a low degree of injury during an operation.
- For integration:



- Integration should be done with as less technical, process and organizational intrusion as possible.

5. Showcase

- Realized in our integration laboratory
- A mainframe based legacy application is integrated with a modern shop system

CICS EXAMPLE CATALOG APPLICATION - Inquire Catalog

Select a single item to order with /, then press ENTER

Item	Description	Cost	Order
0010	Ball Pens Black 24pk	2.90	-
0020	Ball Pens Blue 24pk	2.90	-
0030	Ball Pens Red 24pk	2.90	-
0040	Ball Pens Green 24pk	2.90	-
0050	Pencil with eraser 12pk	1.78	-
0060	Highlighters Assorted 5pk	3.89	-
0070	Laser Paper 28-lb 108 Bright 500/ream	7.44	-
0080	Laser Paper 28-lb 108 Bright 2500/case	33.54	-
0090	Blue Laser Paper 20lb 500/ream	5.35	-
0100	Green Laser Paper 20lb 500/ream	5.35	-
0110	IBM Network Printer 24 - Toner cart	169.56	-
0120	Standard Diary: Week to view 8 1/4x5 3/4	25.99	-
0130	Wall Planner: Eraseable 36x24	18.85	-
0140	70 Sheet Hard Back wire bound notepad	5.89	-
0150	Sticky Notes 3x3 Assorted Colors 5pk	5.35	-

F3=EXIT F7=BACK F8=FORWARD F12=CANCEL

CICS Catalog Manager

Office DEPOT
Taking Care of Business

YOUR SHOPPING CART
is empty

Mainframe Articles

Search: Search only in 'Mainframe Articles' Advanced Search

You are here: Mainframe Articles

Showing 1 - 3 of 3 items.

FranklinCovey® Refillable Wirebound Leather Binder And Recycled Starter Pack, Classic-Size, 5 1/2" x 8 1/2", Black
Manufacturer # FDP3952 page size 5 1/2" x 8 1/2" new Details cover color Black cover material leather binding type wirebound number of rings 7 closure type open calendar type undated accessory pockets yes file pockets yes holiday pages yes notes section yes information pages yes telephone and address pages yes planner pages yes tabbed dividers yes business card holder yes pen loops no page marker included yes writing pad included no ink color Black paper color white page design two color total recycled content 30 % postconsumer recycled content 30 % meets U.S. government environmental standards yes refillable yes height 9 1/2 inches width 6 3/4 inches depth 3/4 inch brand name FranklinCovey manufacturer FranklinCovey
Manufacturer:
\$ 63.59

Pentel Quicker-Clicker Automatic Pencil, 0.5 mm, Smoke
point size 0.5 mm refillable yes eraser included yes grip type rubberized quantity 1 brand name Pentel pocket clip yes retractable no manufacturer Pentel
Manufacturer:
\$ 2.49

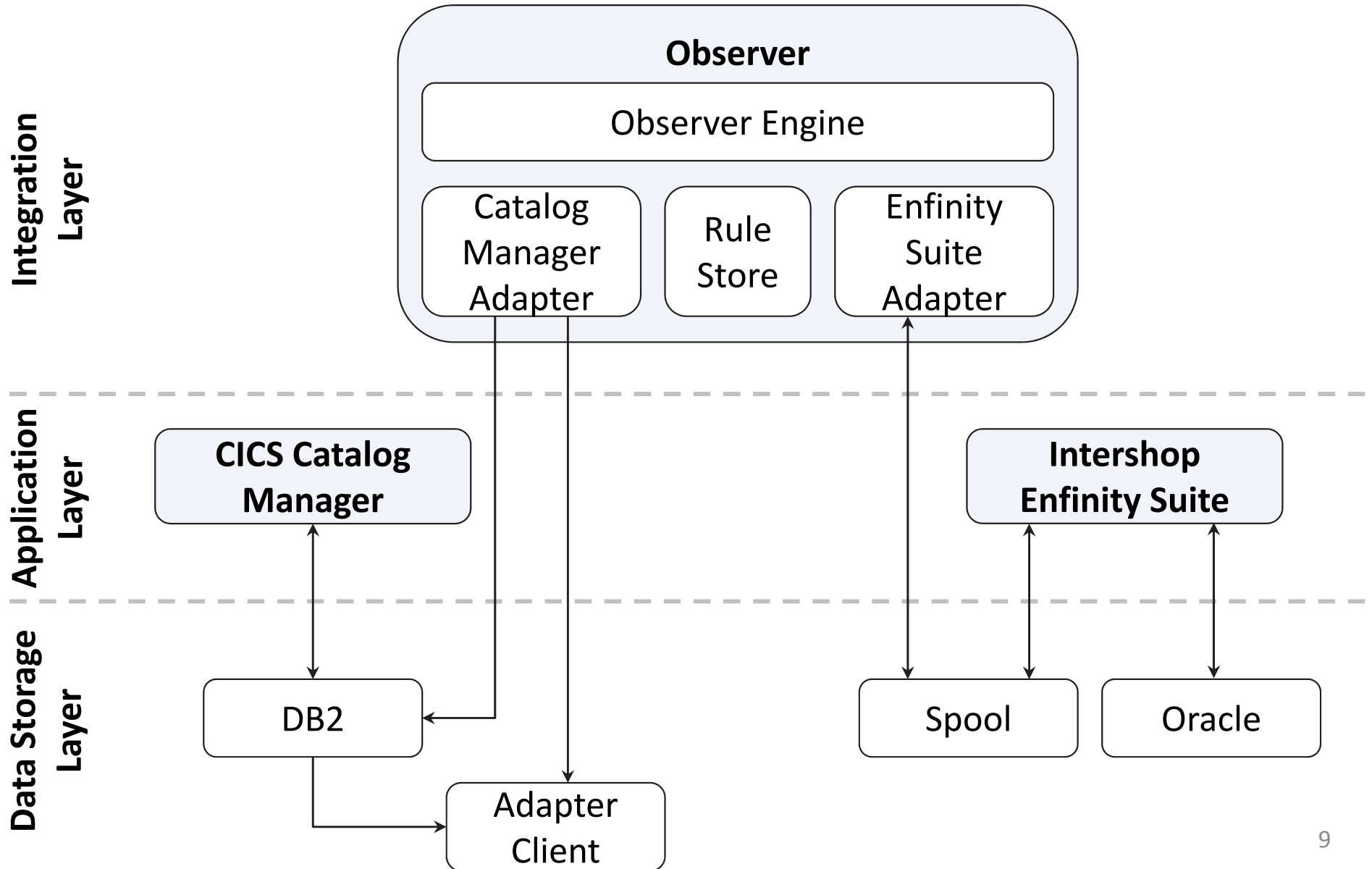
Scotch General Purpose Box Packing Tape 3710, 2 x 55 Yd., Clear, Pack Of 6
Manufacturer # 3710 CL 48N tape length 1,980 inches tape width 2 inches core diameter 3 inches dispenser included no quantity 6 brand name Scotch manufacturer 3M
Manufacturer:
\$ 7.59

Showing 1 - 3 of 3 items.

Intershop Enfiniti Suite

- As far as possible, without any change

5. Showcase



6. Conclusion

- Practical need of smarter integration concepts was deduced by an empirical study
- We described lightweight and minimally-invasive concepts
- A showcase presents a minimally-invasive integration approach
- Further needs for research:
 - Metrics for the measurement of weightiness and invasiveness