

Service Virtualization

CA LISA introduction

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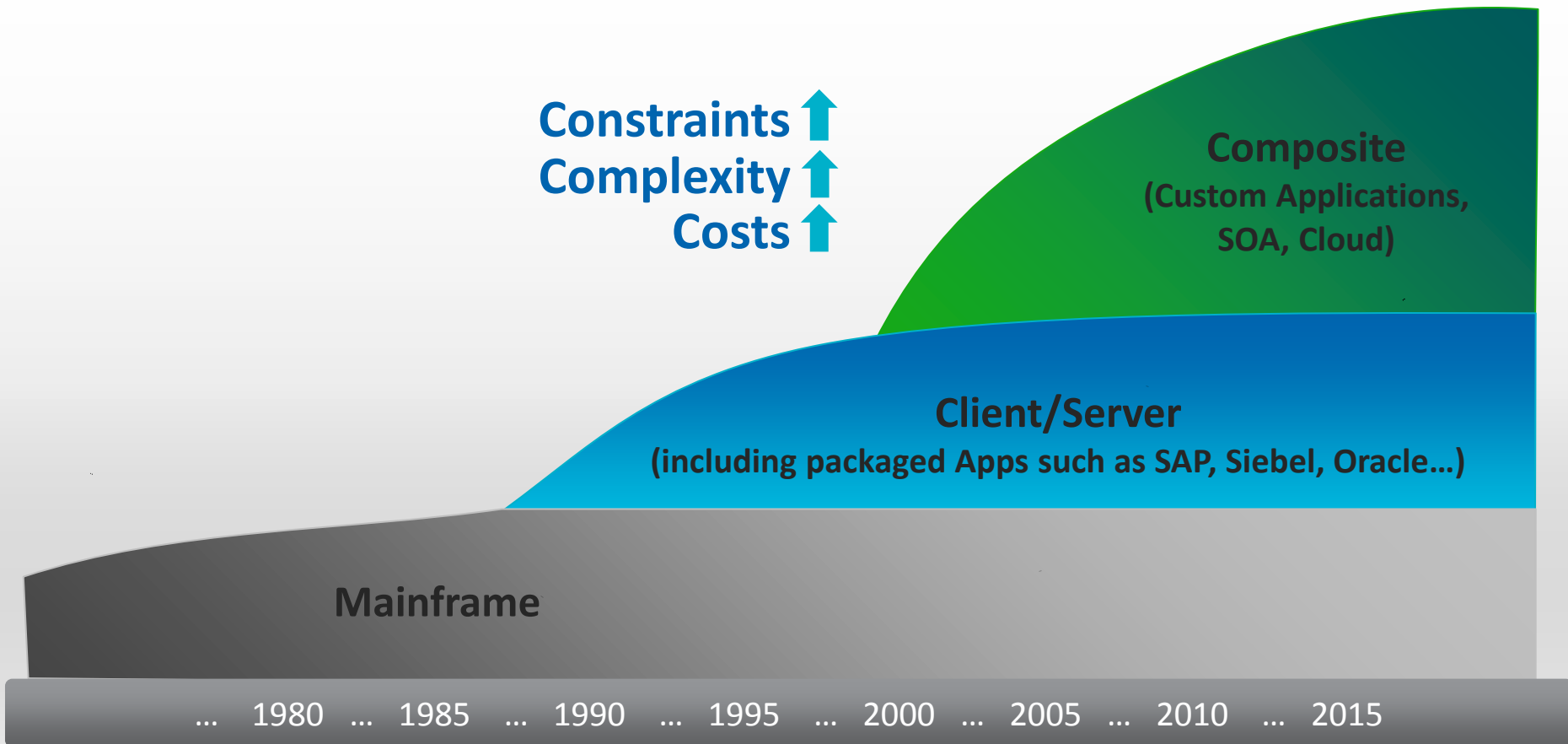


innovate or die

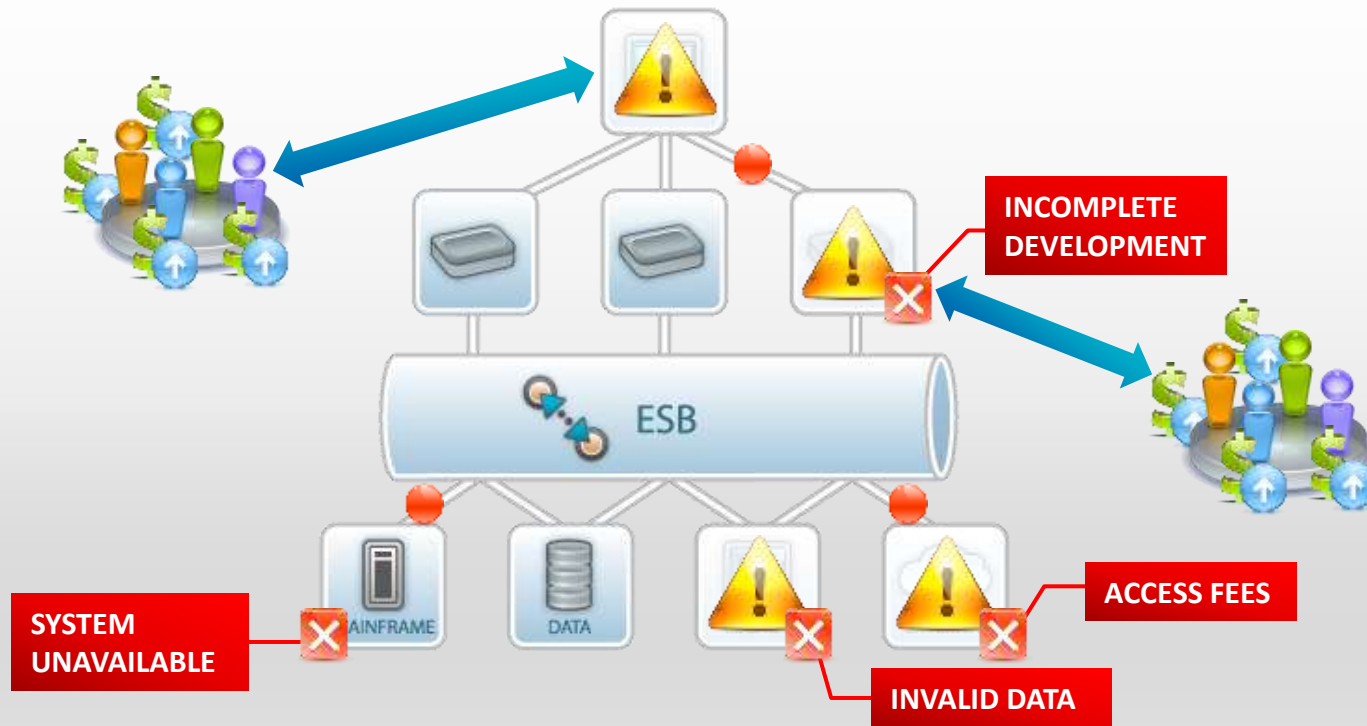


- The Product is the entire brand and customer experience
- Service oriented products are delivered late, over budget and with questionable quality...WHY?

changes in software development

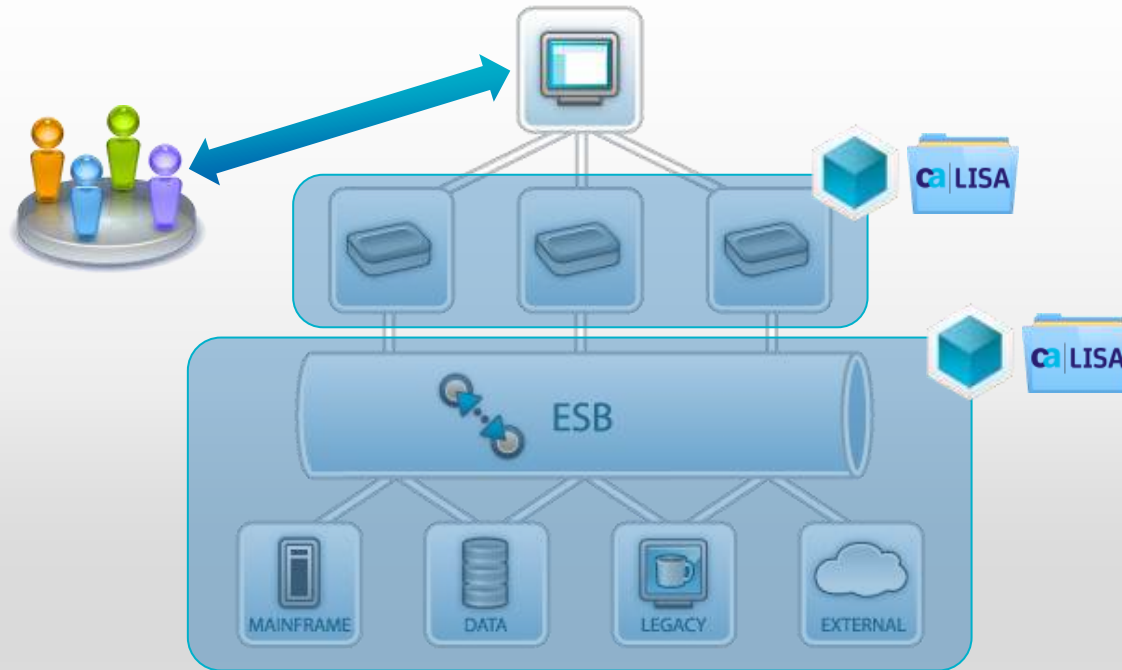


the big problem: constraints



“I can’t do anything until I have everything... and I never have everything!”

solution: service virtualization



service virtualization

how does it work?

CAPTURE



PROCESS



MODEL



- Structured Conversations
- Observe
- Understand
- Protocol-Level
 - Recorded traffic
 - Design specs
 - Sample RR pairs
 - Transaction logs
 - Manual Creation
 - Byte-Code

- Heuristics
- Analytics
- Algorithms
- State


- Sophisticated Behavior
- Dynamic Properties (Dates, values, etc.)
- Scenario Support
- Developer Solution
- Compiled Model vs. Stubs
- Automatic Healing

capture


Virtual Service Image Recorder

Please provide us with some basic information about what is to be recorded and select the appropriate protocol(s) involved. Some transport protocols do not allow for a data protocol.

Basics | Notes

Write image to: C:\Lisa\examples\VSservices\Images\newimage.vsi  Browse...

☒ Replace ☐ Merge into

Import traffic:  Browse

Transport protocol:

- IBM MQ Series
- Standard JMS
- Java
- JDBC (Agent based)
- JDBC (Driver based)
- TCP
- CICS LINK**
- DRDA

Default navigation:

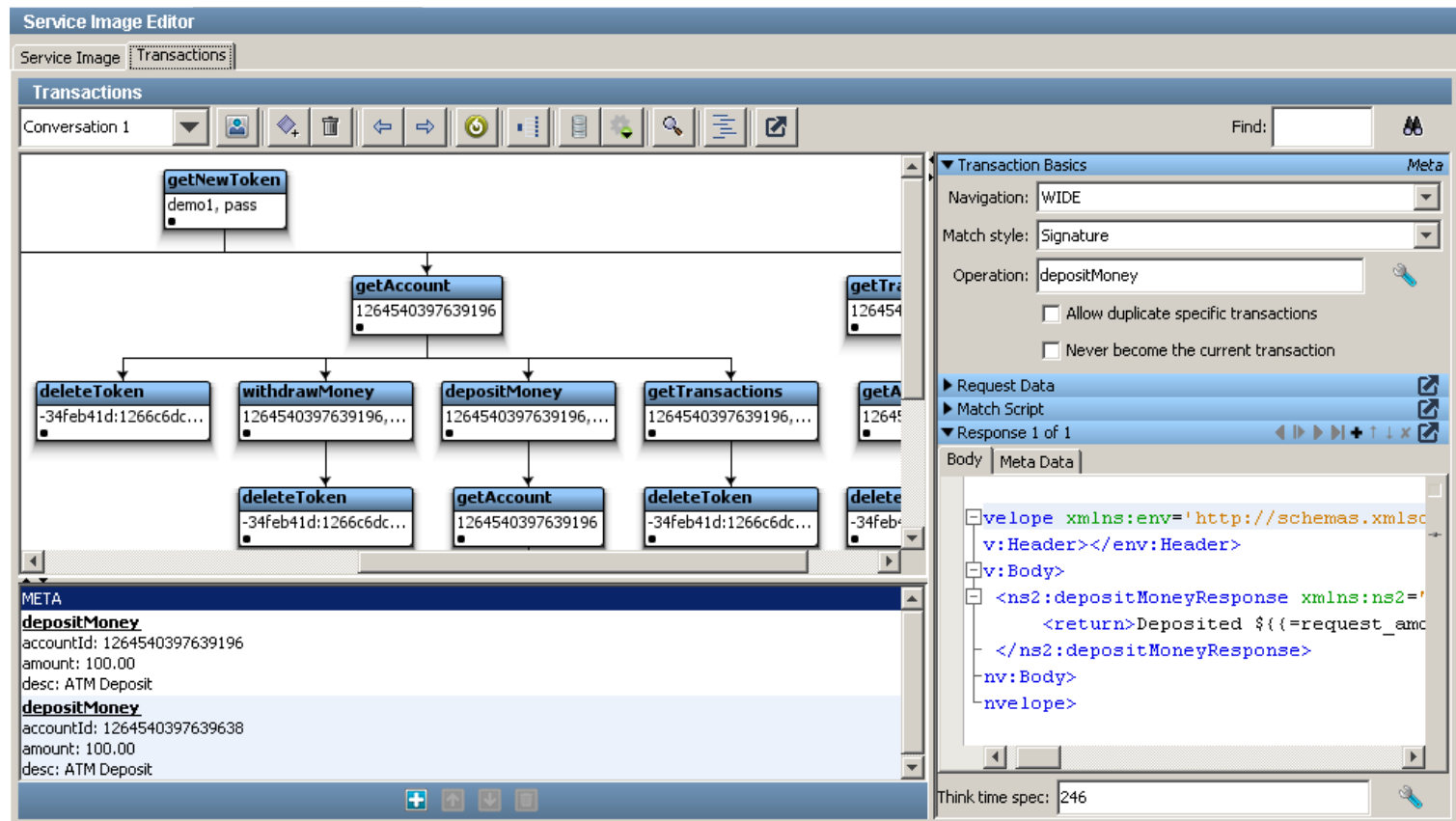
Export to:

Model file:

VS Model style: ☐ More flexible ☒ More efficient

First Prev Next Cancel Finish

process and model



where do we start?

3 common applications



Integration

- Mergers and Acquisitions
- “Business-in-a-Box”
- Application Modernization



Deadline Critical

- Value Release
- SDLC Optimization Opportunities
- Parallel Development



Performance Engineering

- Hardware Reduction
- Confidence in Application Scalability



Integration

- Leading Bank
- “Bank-in-a-Box”



Deadline Critical

- Leading Telco
- iPhone Launch

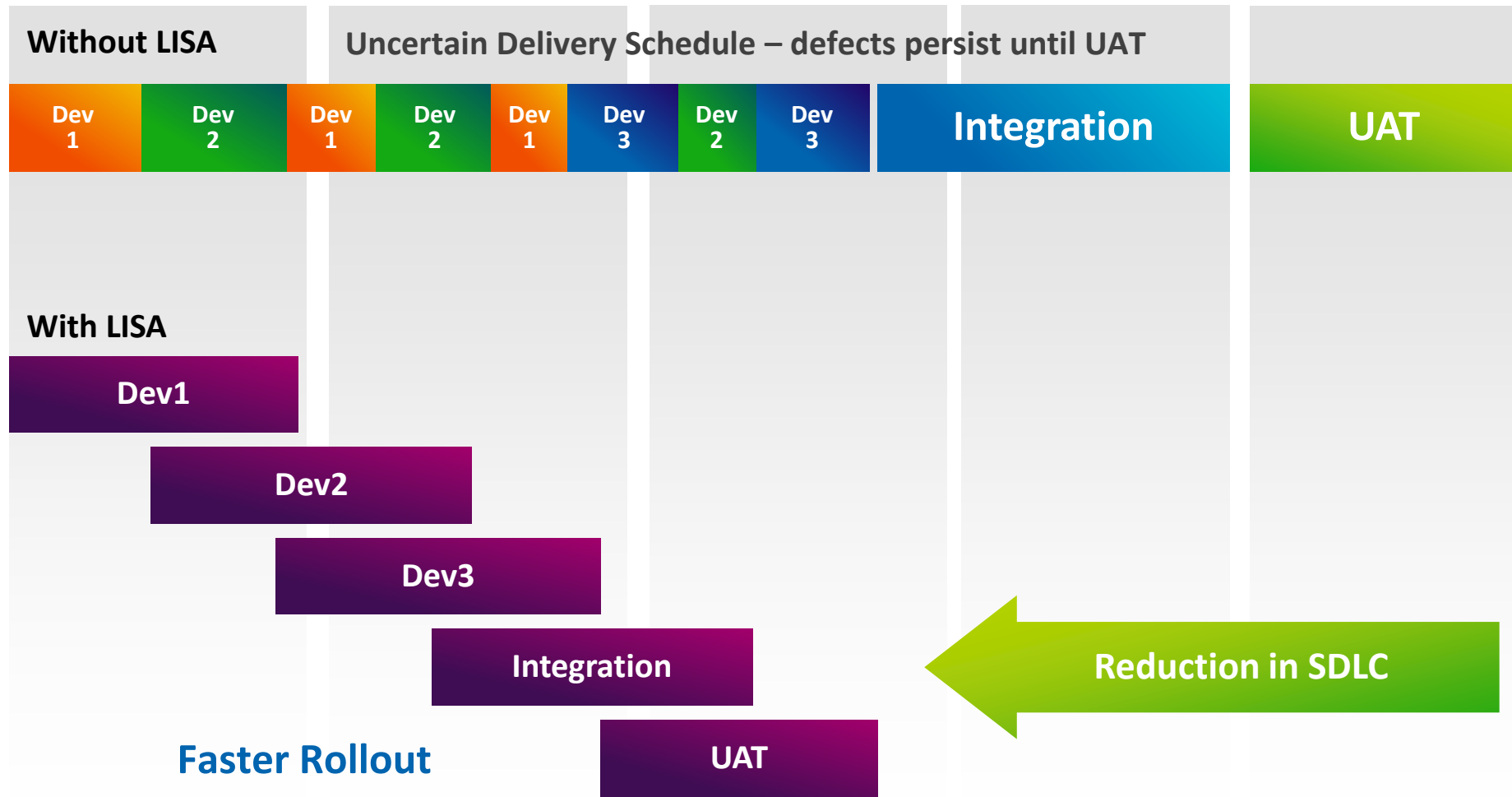


Performance Engineering

- Leading Bank
- \$30M+ HW Savings

constraint: schedule dependencies

1- “shift-left” the SDLC



constraint: infrastructure availability

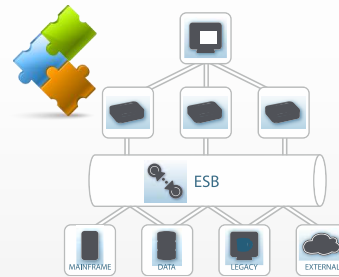
2- infrastructure requirements reduction

BEFORE



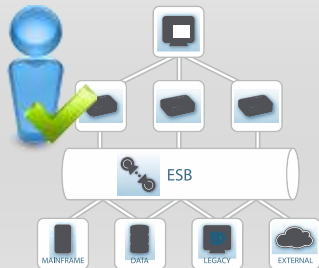
Dev 1-n

- Contention for access between on-shore and off-shore teams



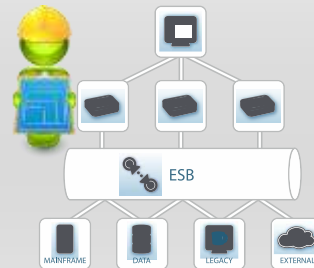
Integration 1-n

- Constrained mainframe and complex coordination cycles stunted agility



Test 1-n

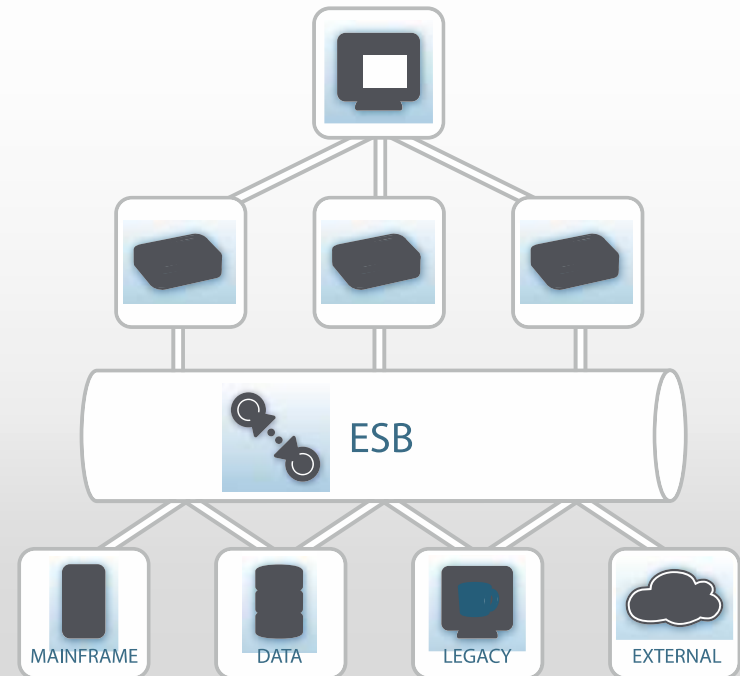
- Environments not realistic and require manual data and maintenance



Pre-Prod 1-n

- Mainframe access required for any testing

AFTER



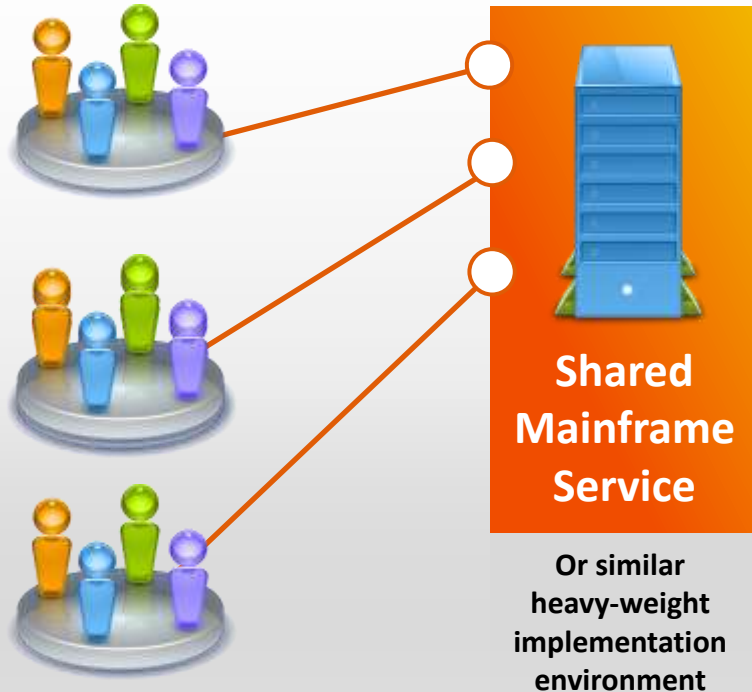
Virtual Environments for Dev/Integration/Test/Pre-Prod

- Eliminated need for mainframe in most scenarios
- Avoided \$10M infrastructure cost by eliminating a mainframe expansion
- Avoided potential millions of dollars of availability charges

constraint: system availability

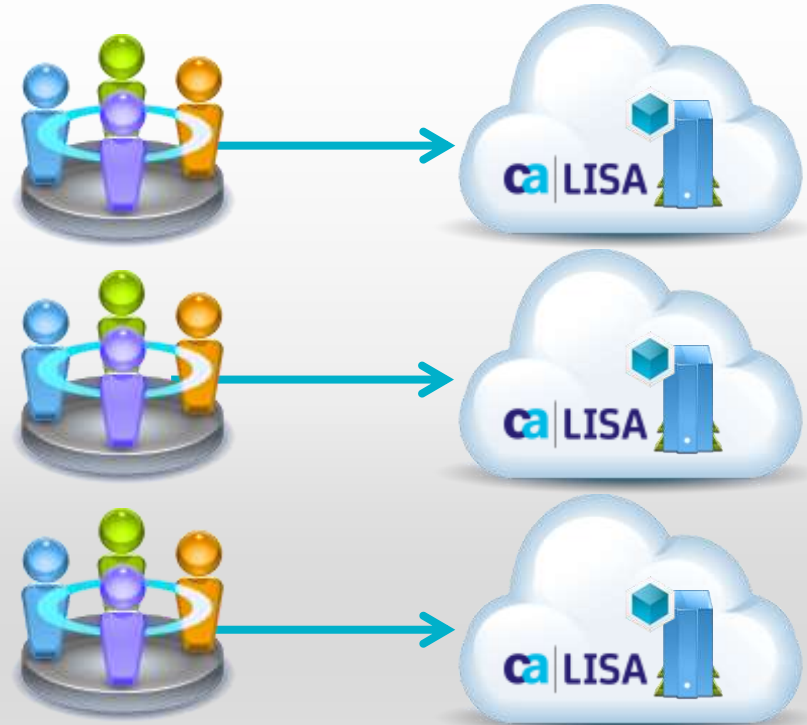
3- performance readiness

BEFORE



- Constraints affecting performance team productivity, with inability to isolate flaws
- \$700k per year to build and maintain stubs with only limited functionality

AFTER



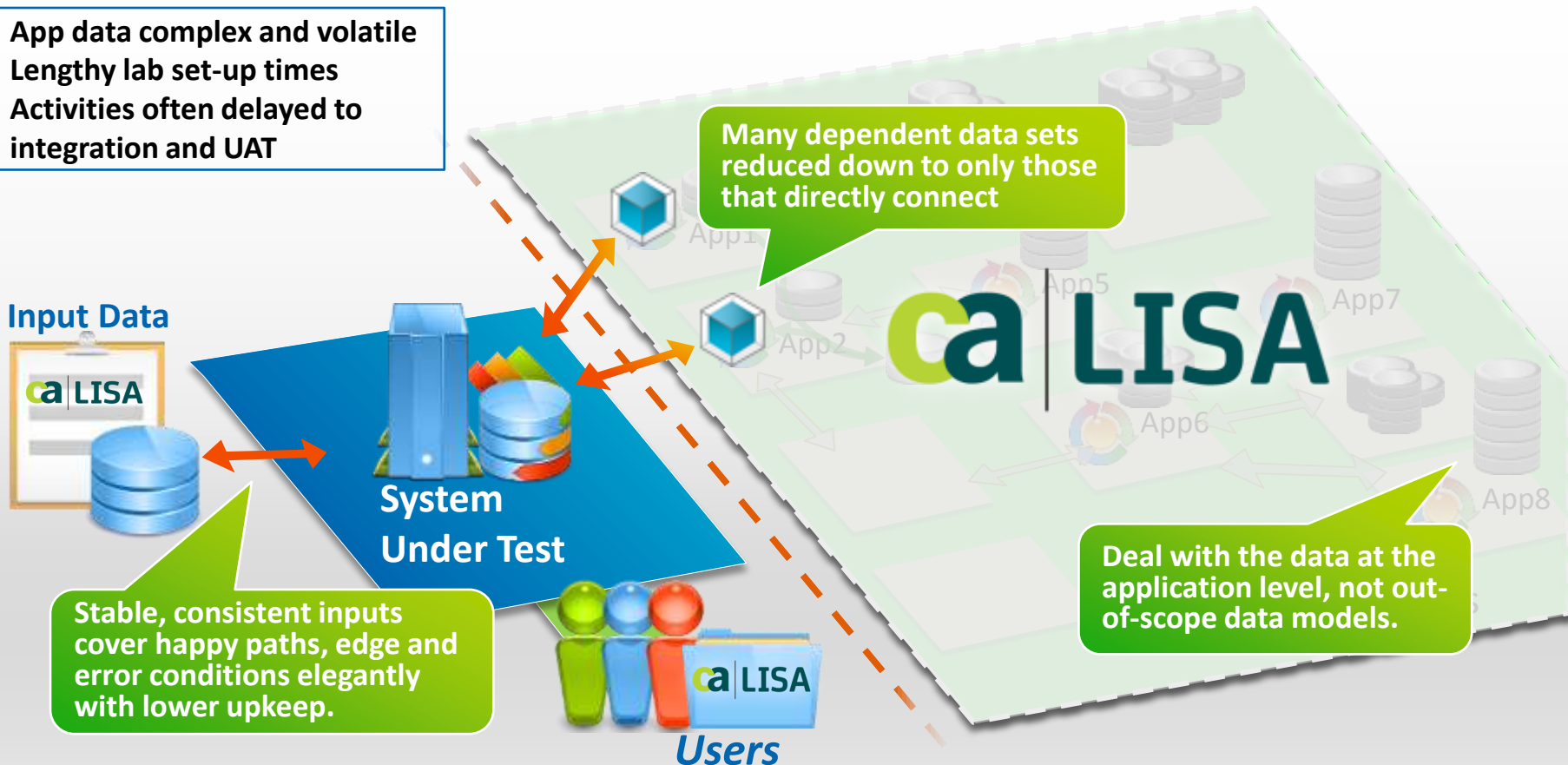
- 300% more performance coverage, even at a component level
- Avoided \$20+ million in new infrastructure investment

constraint: data volatility

4- data & scenario management

Before

- App data complex and volatile
- Lengthy lab set-up times
- Activities often delayed to integration and UAT



- 30-day sprints for this implementation were reduced by 15-25 %
- Data setup time reduced by 68% by providing smart data
- Automated data and scenario creation

Flexible application development with CA Gen

supporting multiple deployment platforms and architectures

User Interfaces

Web Browser
Mobile Device
GUI



Languages

COBOL
JAVA
HTML
JSP
C#
ASP.NET
C



TP Monitors

CICS
IMS/DC
Tuxedo
Transaction
enabler



Communication Middleware

TCP/IP
MQ
Tuxedo
ECI
SNA/LU6.2



Architectures

Web Services
SOA
Cloud enabled
Web browser
Batch
Traditional
blockmode

Operating Systems

z/OS: CICS & IMS
Linux on System z
Unix
Linux (x86)
Windows



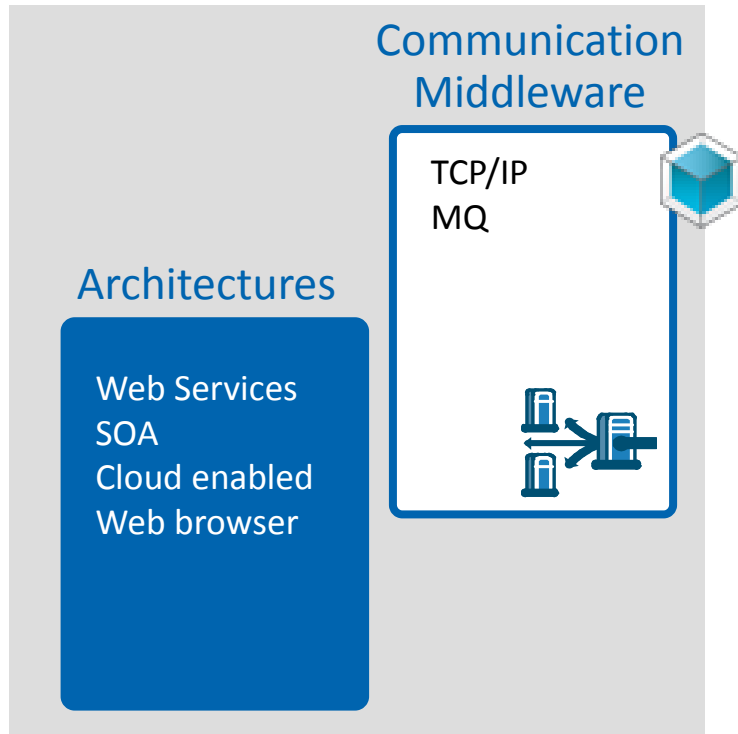
Databases

DB2
Oracle
SQL Server
JDBC
ODBC



*Generate entire applications or integrate with
existing application components*

Complementing CA Gen with Virtualization



- Integration boundaries between systems.
 - Test services before the GUI is completed
 - Virtualize services that GUI development requires
 - Decouple development teams so that they can work in parallel.
 - Load test individual components, Service Level Decomposition.

our customers' experience

- Reduce infrastructure costs
- Reduce time to market
- Detect and fix bugs earlier in the cycle

CA Expo'12– Did you know?

- **Was:** CA Expo'12 - Größtes Treffen von CA Technologies Kunden, Partnern, Spezialisten aus dem Anwenderkreis und von CA Technologies
- **Wann:** 30. Oktober 2012 (29.10. User Group Meetings, Partner/MSP Day)
- **Wo:** Congresscenter Rosengarten Mannheim
- Ausgewähltes Fachprogramm mit namhaften Kundenbeiträgen (LH Systems, T-Systems, A.T.U., SAP, AXA, LVM Versicherungen.....)
- Ausstellung mit 20 Informationsständen von CA Technologies und Partnern
- Interessante Keynotes zu Markttrends, Business Service Innovation und Non-IT-Vortrag „Schnell und sicher entscheiden“ von Dr. Markus Merk
- Networking in der Ausstellung, den Pausen und beim Get-together
- Jetzt handeln: <http://ca.com/caexpo/mannheim>
- **Termin reservieren – anmelden – IT beschleunigen – Geschäftserfolg maximieren!**

Thank you

