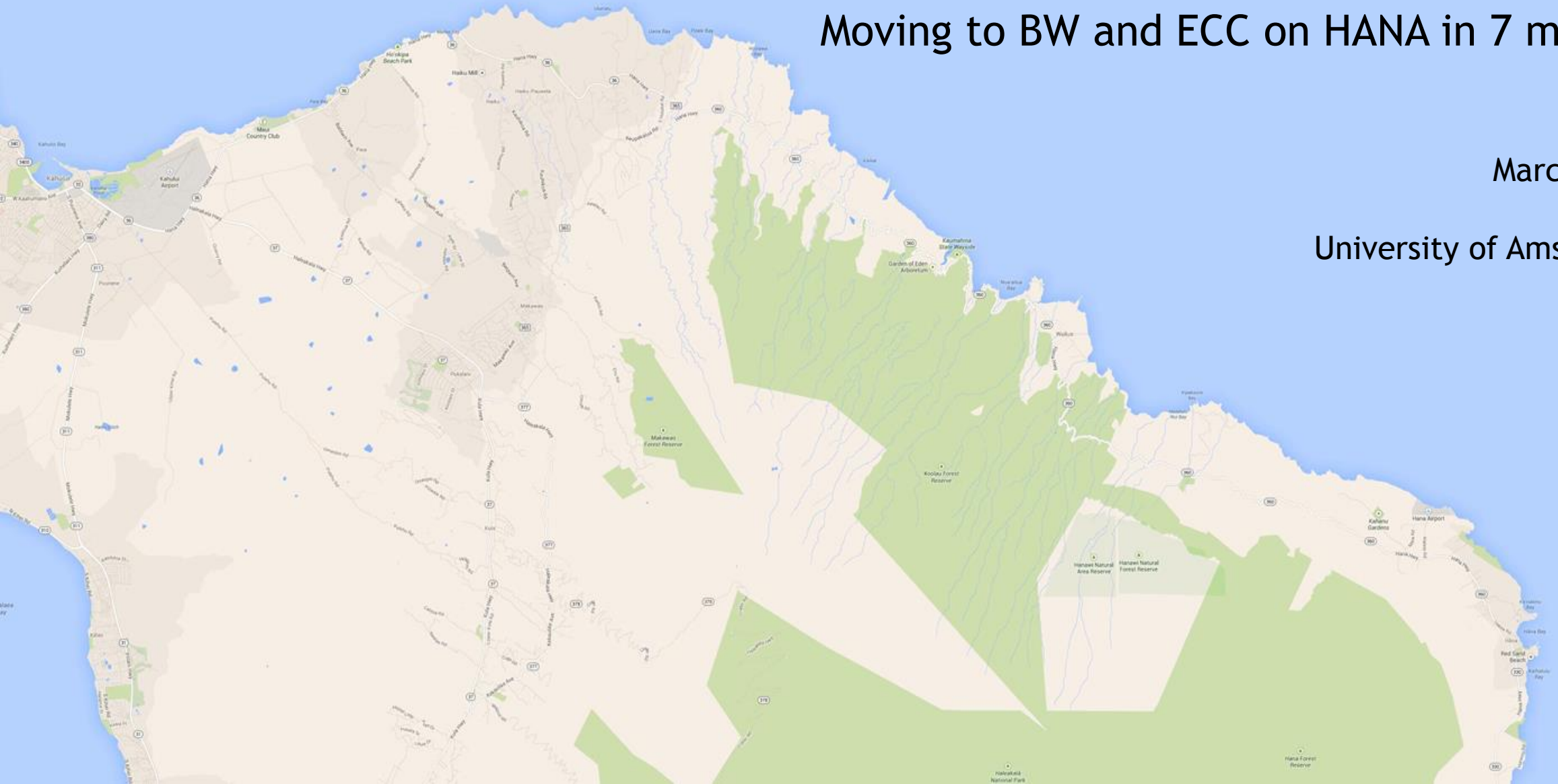
The Road to HANA

Moving to BW and ECC on HANA in 7 months*



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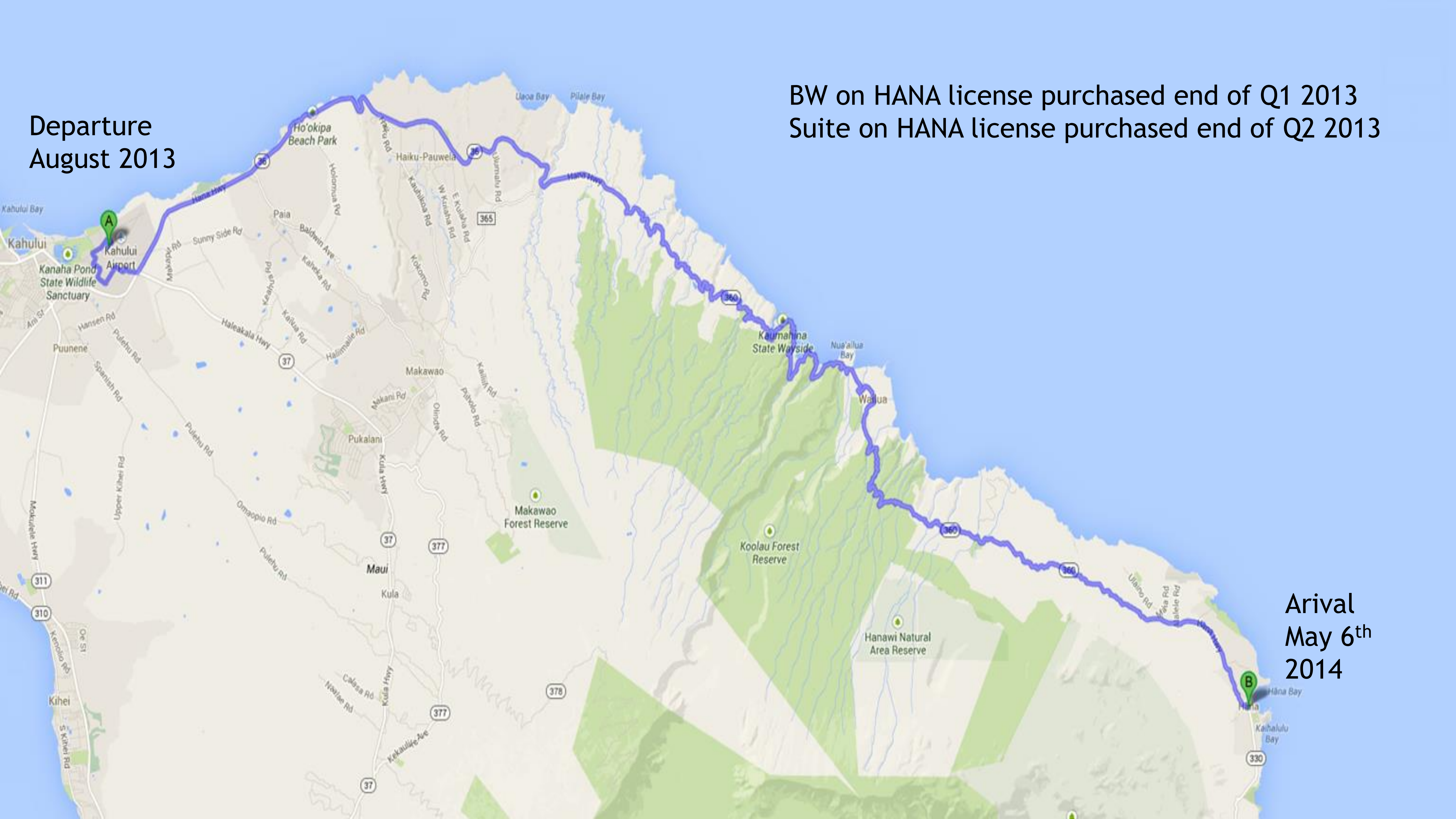
Agenda

- Why did we do it?
- How did we do it?
- What are the results?
- What are our experiences?
- Key take aways
- Next steps

Departure
August 2013

BW on HANA license purchased end of Q1 2013
Suite on HANA license purchased end of Q2 2013



Arival
May 6th
2014

A few words on

- Merged with Amsterdam University of Applied Sciences (HvA)
  - over 300 programs of studies
  - 70.000 students
  - 10.000 FTE
- 382 years
- UvA is **not** a “SAP unless” institution
- SAP is not used for the primary processes
  - Student Information System is Oracle/Peoplesoft Campus Solutions

BO

BW

Federated Portal

ECC

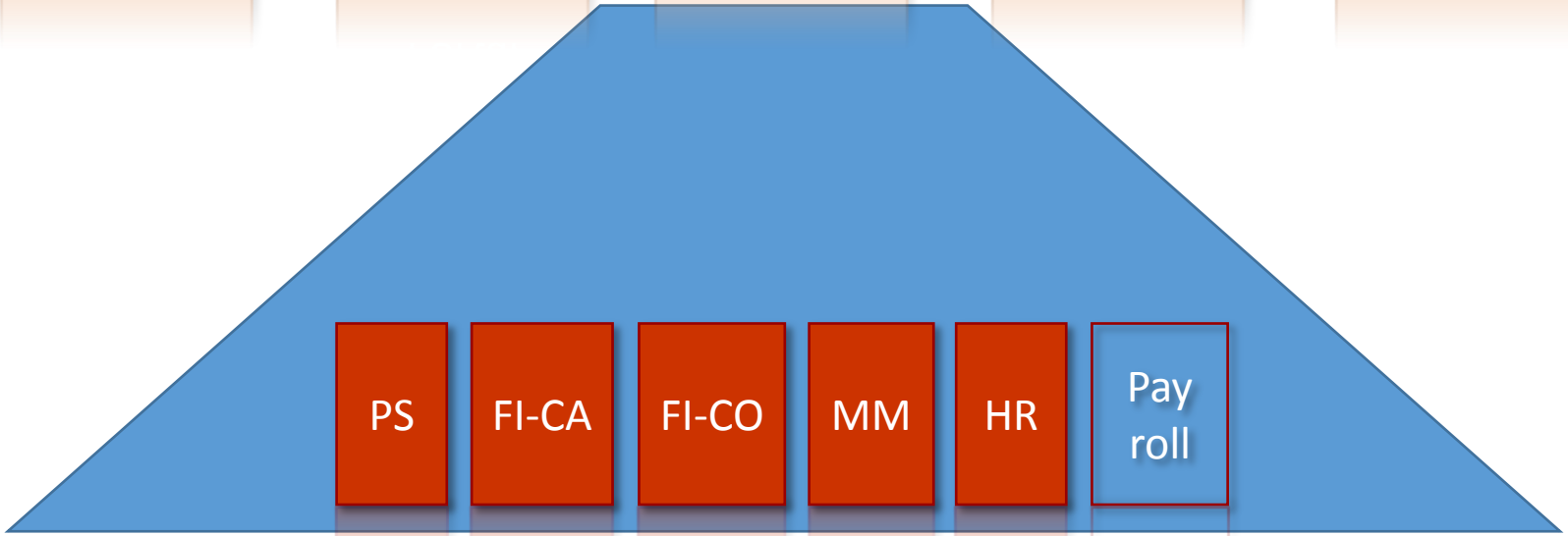
PI

SolMan

CRM

GRC

All Unicode!

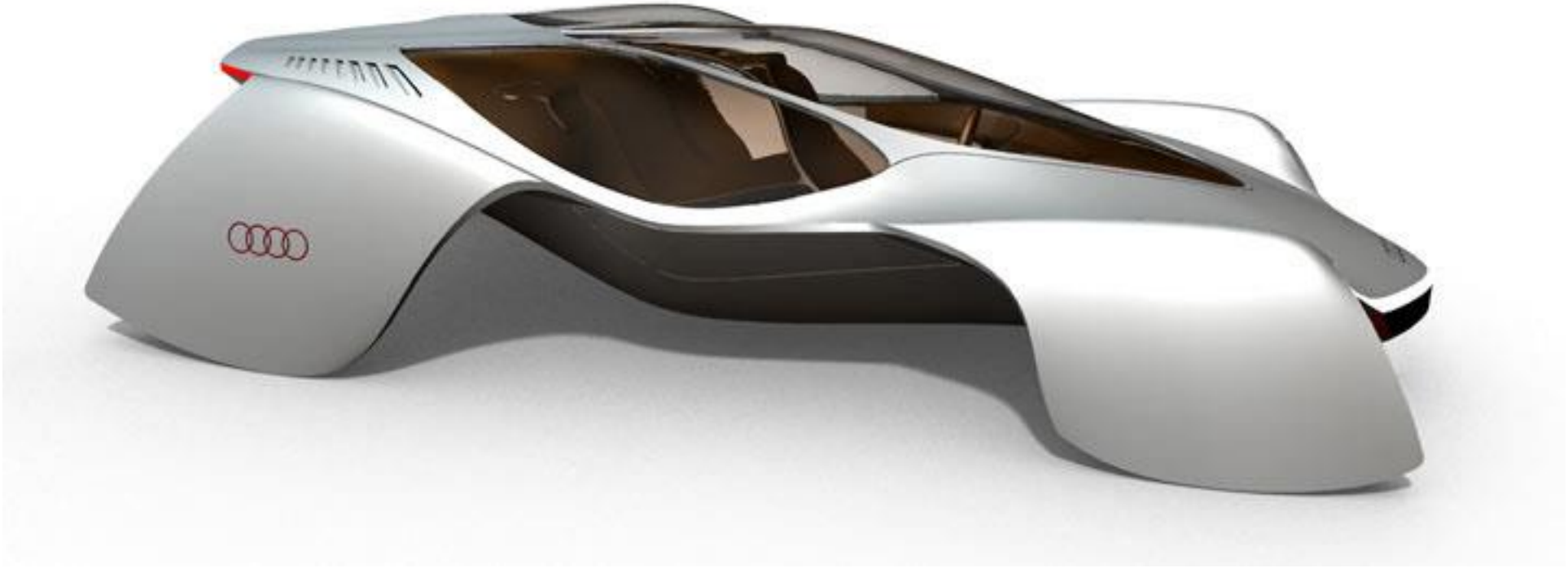


So, why did we do it?

What did we aim for?

A new aim!

So this is what we proposed!



Okay, but why HANA?

Why not?

Please note:

The key is that we did not just migrate to HANA, we changed and moved our whole SAP infrastructure!

Project Team

- 1,5 project manager
- 1 test manager
- 1 SAP certified migration consultant
- 1 pre- & post-configuration consultant
- 1 guy who knows a lot about the as-is and the to-be
- 1 dba
- 1 VMware / OS expert
- 1 portal consultant
- 1 network & VPN expert
- 10-30 application module experts and testers

BW
DEV/ACC
MEDIUM+ (512GB)

SoH
DEV/ACC/SBX
LARGE (1TB)

BW
PRD
MEDIUM+ (512GB)

SoH
PRD
MEDIUM+ (512GB)

4 x HP Proliant DL980 G7

- Compared two HW vendors in the end
- HW prices in ½ in 3 months
- HANA Rev 68 (SP6)
- All separate instances, not schema's
- Partner selection

First up: BW on HANA

Main business drivers

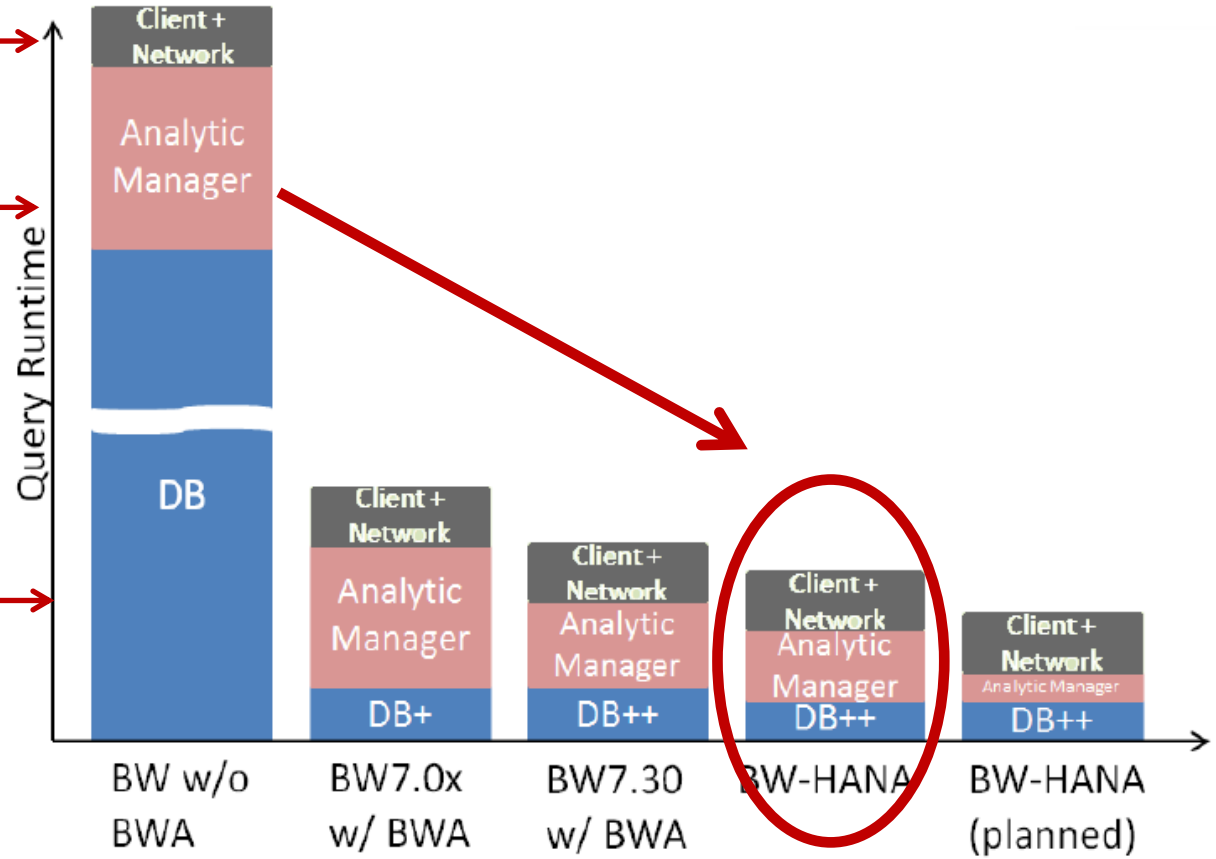
- Bad performance web reports (3.5 Web Applications)
- Bad performance loading data
- Bad performance federated portal
- Plans with Business Objects and Design Studio

BW on HANA: Potential

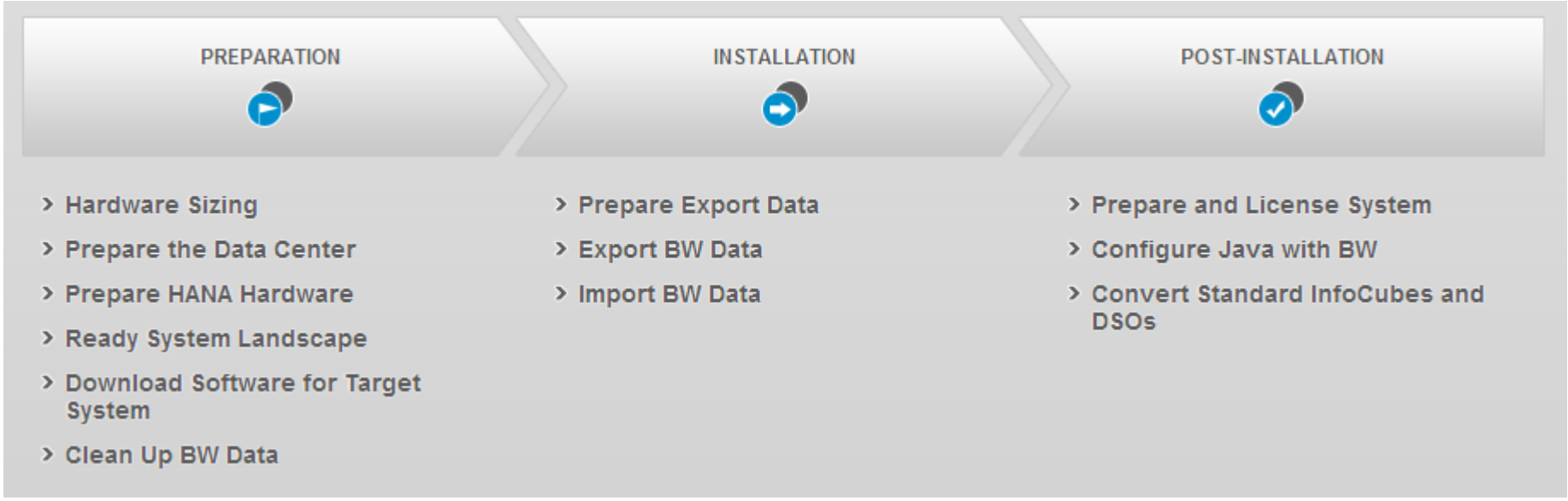
Front-end
(25% - 75 %)

OLAP
(10% - 26 %)

Database
(15% - 49 %)



BW on HANA: Cookbook



https://cookbook.experiencesaphana.com/bw/deploying-bw-on-hana/

BW on HANA: Approach

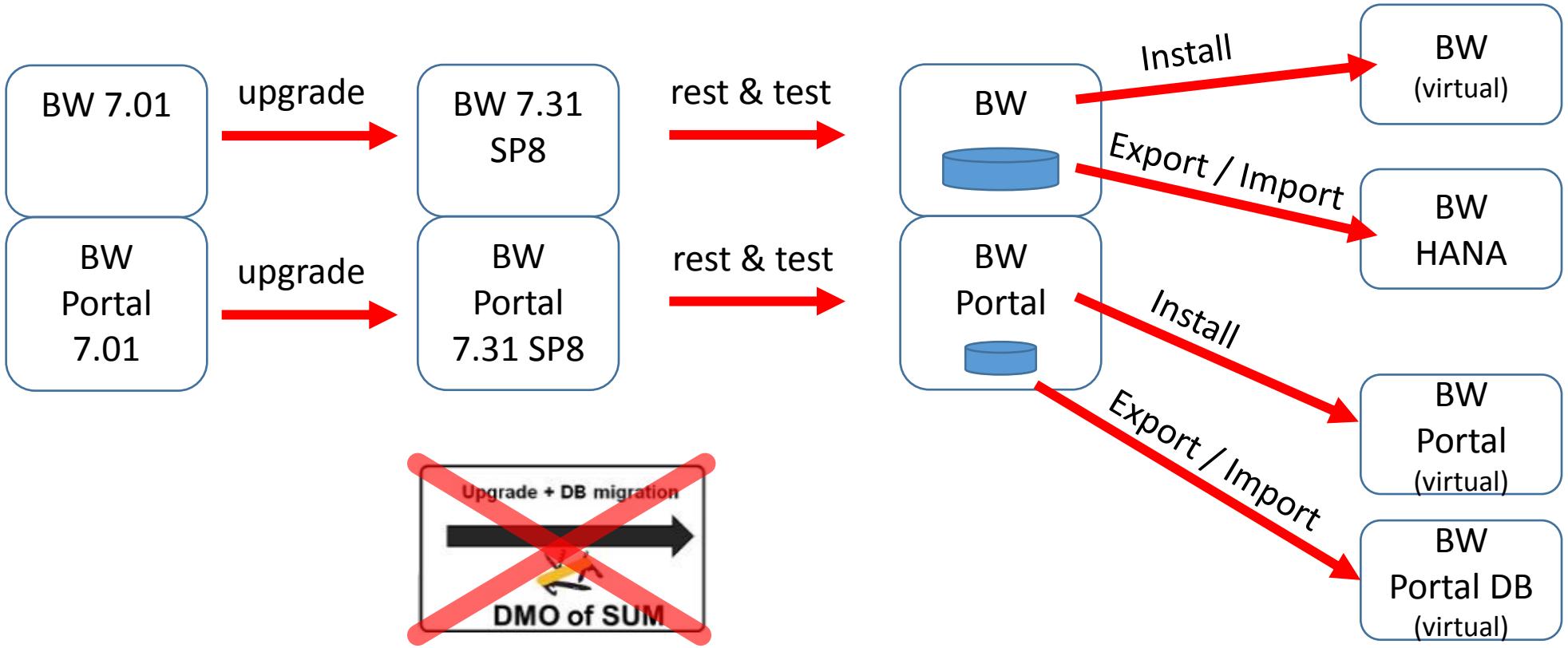
1. Upgrade BW and BW portal from 7.01 to 7.31 SP8
    1. Dev -> Acc -> Prd

2. “Test” Period

3. Migrate BW to HANA and VM -> OS/DB migration
    1. Copy Acc to Tst
    2. Migrate Tst -> Acc -> Dev -> Prd

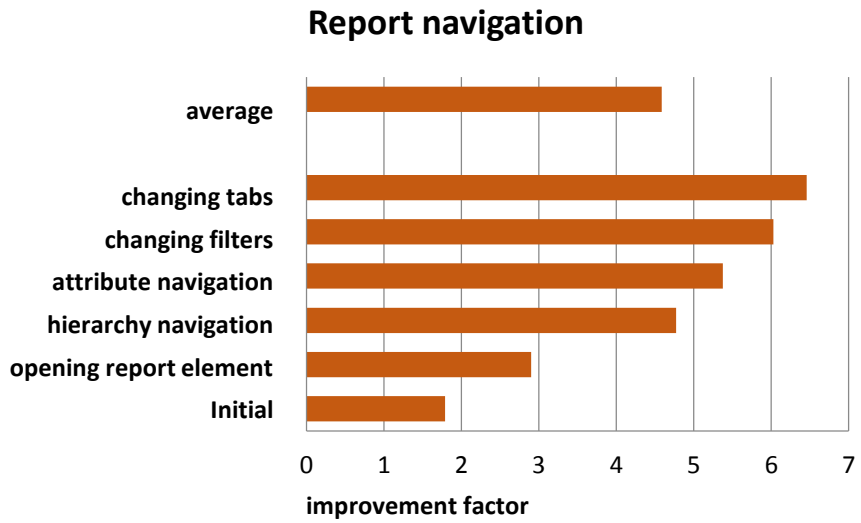
4. Migrate BW portal to VM -> (not HANA)

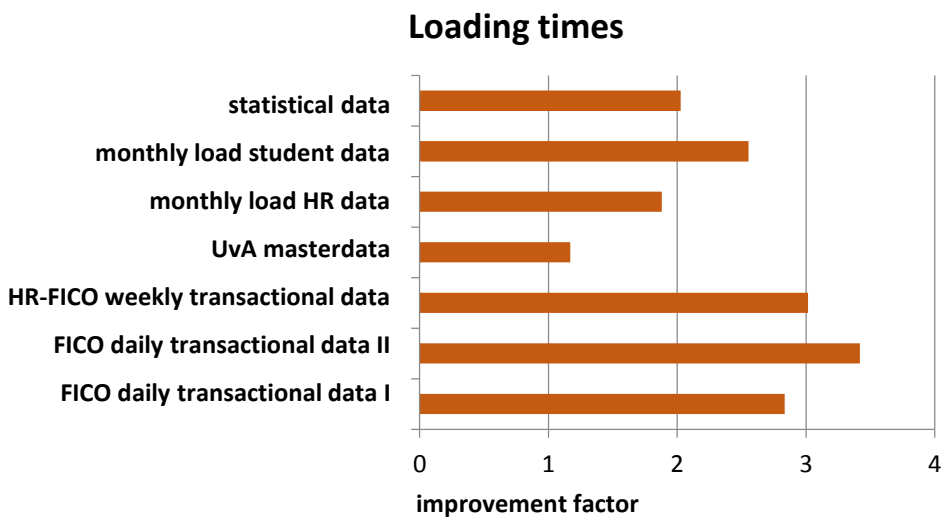
BW on HANA: Migration path



BW on HANA: Results

Upgrade time: 8 weeks + Migration time: 10 weeks
(full development freeze)





BW on HANA: Lesson Learned

Pre-Migration

Network plan
VM sizing
Eliminate large DSOs if possible
Time server synch

Migration

SAP Tools very helpful (SPM)
Not all large tables discovered
Sandbox migration a must
Configure ASCS/AS split

Postmigration

Testing
No changes in process chains required
Business as usual
Housekeeping
Database shrunk 1.8TB -> 300GB

Now for real: Suite on HANA (SoH)

- 1st Customer to Go Live with SoH in the Netherlands
- 1st University to Go Live with SoH worldwide

Main business drivers

- No functional performance reason except a few slow performing transactions and reports
- No real driver in report **"Business Scenario Recommendations for SAP Business Suite powered by SAP HANA"**
- **HANA Live!**

ECC on HANA: approach

1. Upgrade ERP to EhP7 (from 6.05 SP / NW 7.02 to 6.07 SP3 / NW 7.40)
    1. Dev -> Acc -> Prd -> Sbx

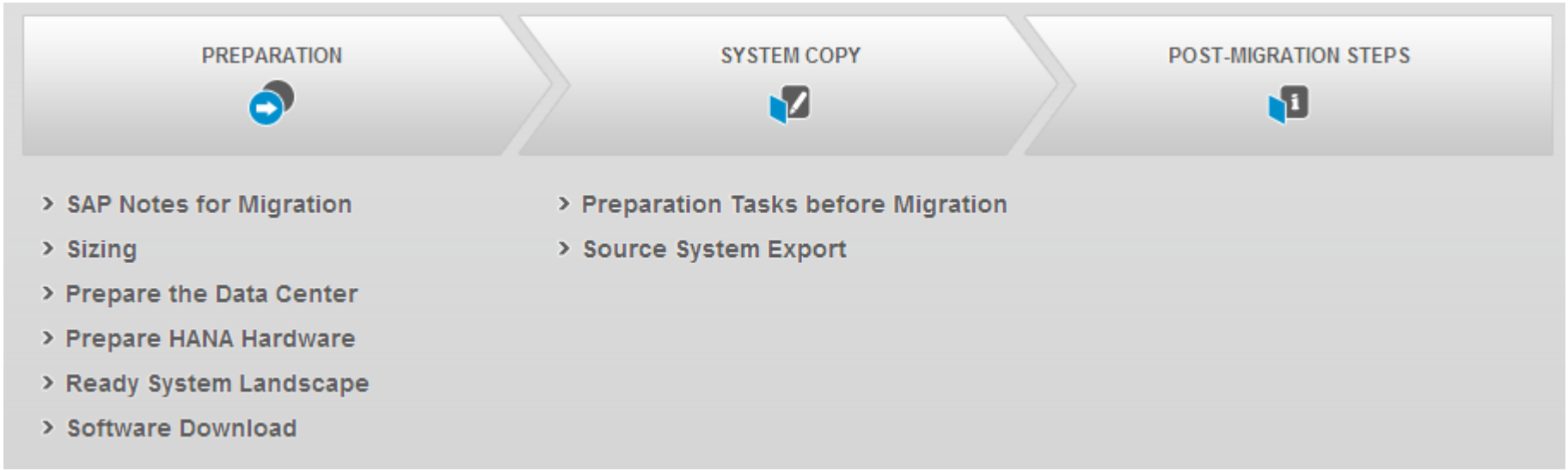
2. Copy Prd to Acc

3. Test Period *(parallel with BW migration)*

4. Migrate to HANA and VM -> OS/DB migration
    - No Sidecar (and no HEC either, remember)
    - Tst (Acc) -> Dev -> Acc -> Prd -> Sbx

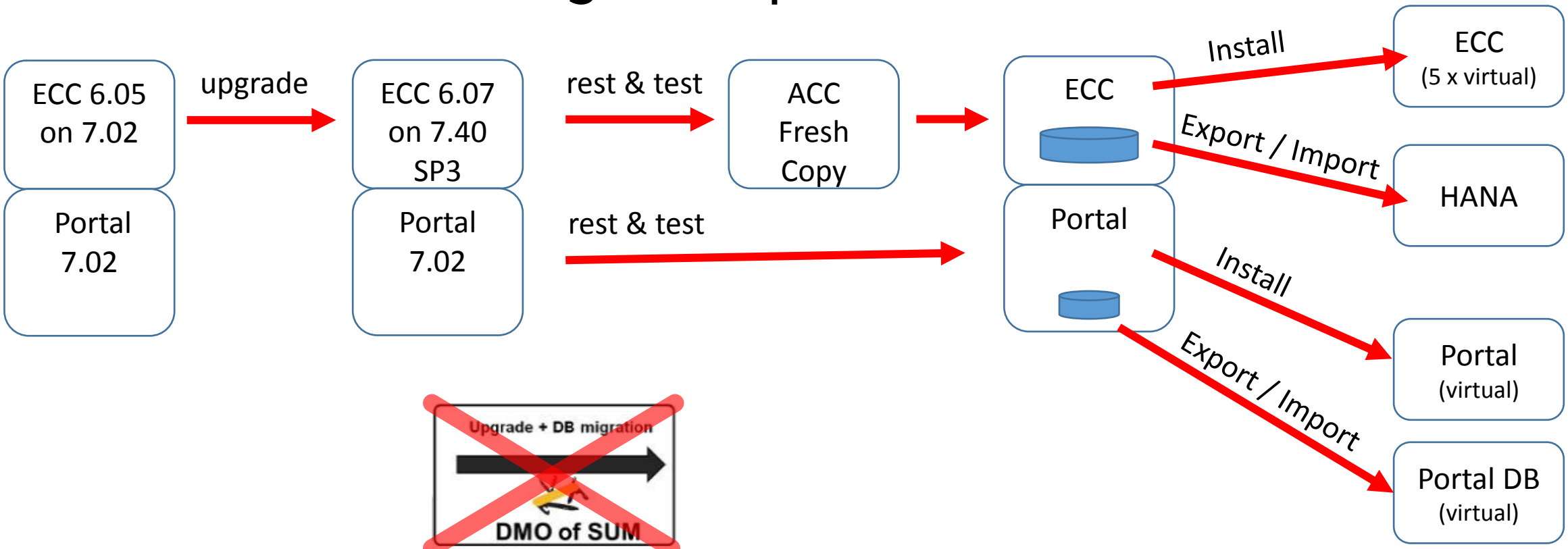
5. Dev + Acc + Sbx in HANA L, Prd in HANA M+

ECC on HANA: Cookbook



https://cookbook.experiencesaphana.com/erp

ECC on HANA: Migration path



ECC on HANA: pre-migration

- Zero Notes (!)
- Sizing Reports
- 30+ Interfaces
- Risk identification
- Solution Manager
- VM and network preparations
- SAP remote check (Enterprise Support)

ECC on HANA: migration

- PRD Export in 11 hours (20, 14)
- PRD Import 6 hours (16, 14)
- PRD Database will shrink from 550GB to 250GB
- Split between ASCS and AS (just CI before)
- From 1/1/3 to 2/3/5 application servers

ECC on HANA: post-migration

- Go Live verification check
- Load Tests (ACC)
- Test

area	type	S	D	A	P
completeness	a comparing	X	X	X	X
	b queries (outside R3)	X	X	X	X
interface files	a outgoing files	?	?	X	-
	b incoming files	?	?	X	-
processes	a major closure processes	X	?	X	-
	b (night) batchprocesses	X	X	X	-
gui	a selected transactions	X	X	X	-
	b portal scenario's	X	?	X	-
interfaces	a chain (asynchronous message based)	?	?	X	-
	b chain (synchronous)	X	?	X	-

Full migration: preliminary results

Upgrade time: 6 weeks + Migration time: 10 weeks
(2x development freeze)

- Significant performance increase regular SAP Gui interaction response times
- Some performance improvement self service portal and federated portal
- 20%-80% performance improvement for background jobs

2 months of pre-migration data vs 2 months of post-migration data

Menu Edit Favorites Extras System Help

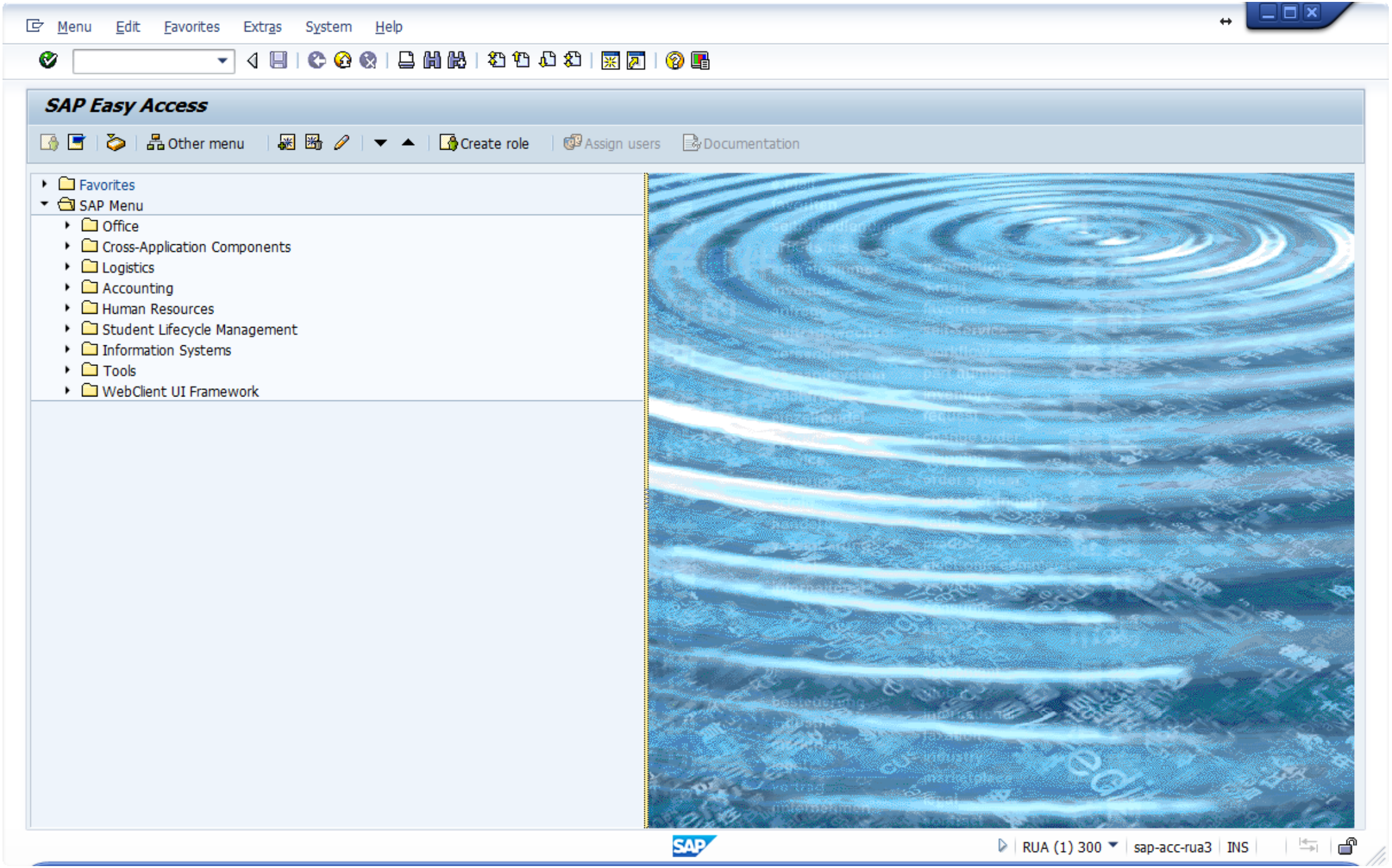
SAP Easy Access

Other menu | Create role | Assign users | Documentation

- Favorites
- SAP Menu
  - Office
  - Cross-Application Components
  - Logistics
  - Accounting
  - Human Resources
  - Student Lifecycle Management
  - Information Systems
  - Tools
  - WebClient UI Framework

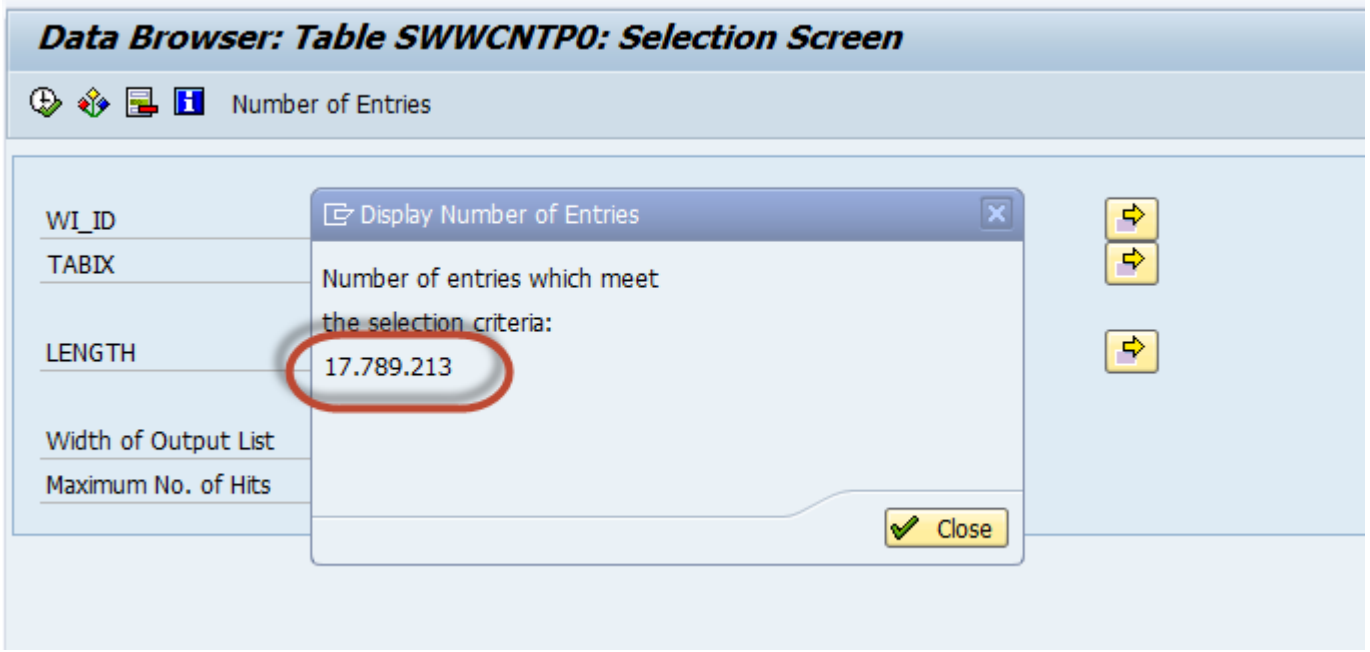
Welcome & Well Done!

SAP | RUA (1) 300 | sap-acc-rua3 | INS


Menu
Edit
Favorites
Extras
System
Help
SAP Easy Access
Other menu
Create role
Assign users
Documentation
Favorites
SAP Menu
Office
Cross-Application Components
Logistics
Accounting
Human Resources
Student Lifecycle Management
Information Systems
Tools
WebClient UI Framework
RUA (1) 300
sap-acc-rua3
INS

A small example

SE16: SWWCNTP0



Old SE16: 30 seconds
New SE16: 5 seconds
New SE16H: 5 seconds

ECC on HANA: Lessons Learned

Pre-Migration

- Notes
- Use latest possible system copy ACC
- No last-minute system copy
- Latest HANA revision
- Latest ERP/NW version
- Time server synch
- Solution Manager

Migration

- SAP Tools very helpful (SPM)
- Not all large tables discovered
- Sandbox migration a must
- Housekeeping DEV system

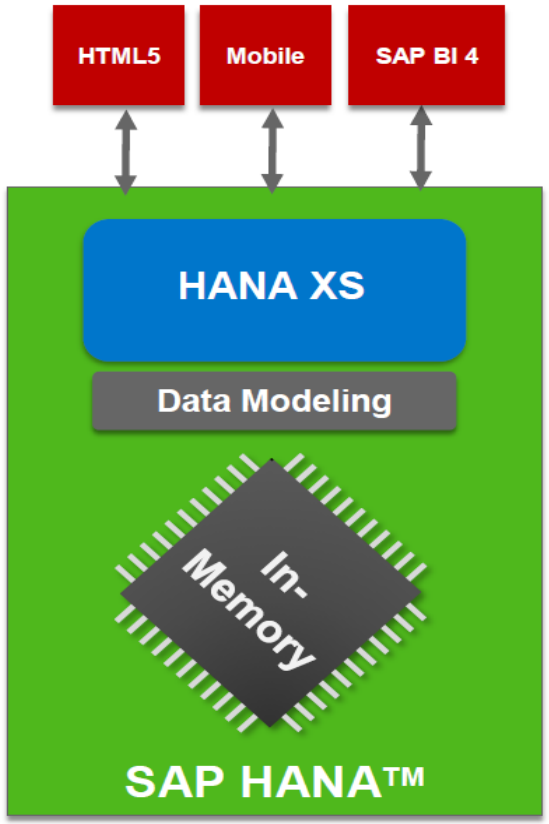
Postmigration

- Business as usual
- Housekeeping
- Zero client dependency

Key Take-Aways

- HANA migration itself is ‘easy’
- Virtualization is a puzzle
- Sandbox migration a must
- Dedicated project manager and test manager
- Have a migration champion
- Try to go for the very latest version
- Performance improvement not exclusively caused by HANA
- Really negotiate HW prices, wait as long as possible

UvA on HANA: next up?



- HANA Live
- UvAdata redesign
- New HANA transactions
- Payroll
- Patching strategy
- Business Objects
- Portal upgrade / Mobile Portal / Fiori / UI5

- Learning Analytics
- Research Data/Applications
- CEI: “Contextual content aggregation and suggestion based on SAP HANA and SAP Fiori”

Questions?

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O'HANA means Family
(Lilo & Stich)