

JOURNEY TO SAP HANA ENTERPRISE CLOUD

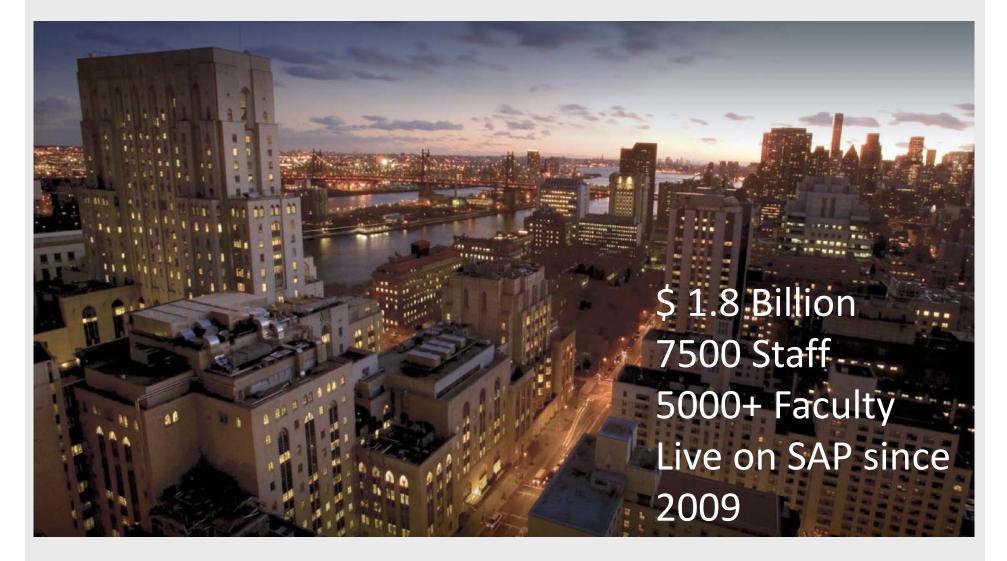


Harish Chava Associate Director

Agenda

- About Weill Cornell Medicine
- WCM SAP System Landscape
- > Why HANA & Why SAP HANA Enterprise Cloud?
- Project Details
 - Scope
 - Governance
 - Schedule
 - Approach
 - Testing Strategy
 - Cutover Planning
 - Challenges
- WCM HEC System Landscape Post Migration
- Post HANA Migration Benefits
- Things To Consider
- WCM Roadmap

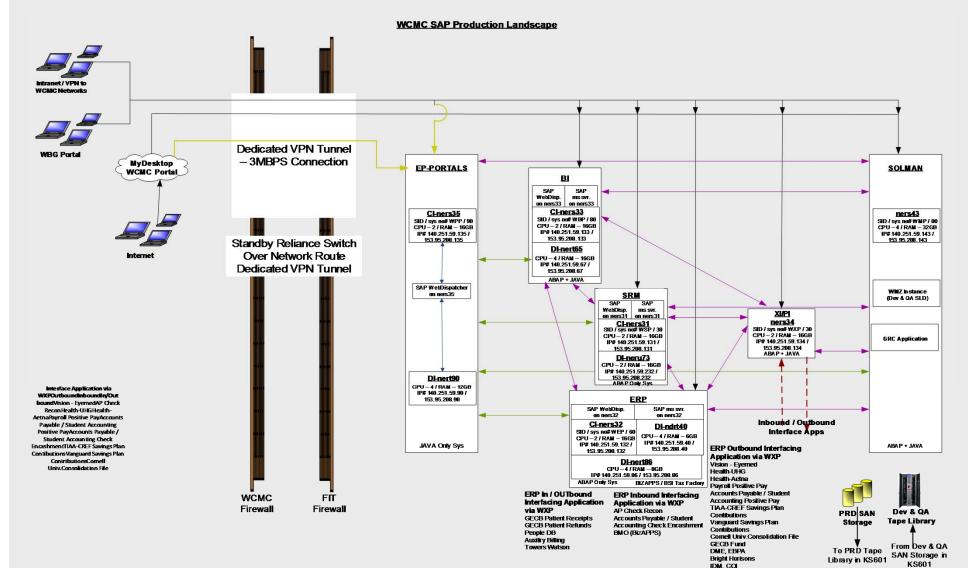
About Weill Cornell Medicine



IT Service Stack by Mission

	Clinical	Administrati	DN Education	Research Admin	Research Informatics	ABC				
	Providers: Config	Faculty/Sta	ff Faculty: Content	PI's & Res Coordinators	Pl's/Res Staff	Pl's/Res Staff				
Content	Practice: Config/Reports	Departmen	ts Degree Programs	Departments	Labs	Labs				
	PO Admin	Central Adm	in Educational Admin	OSRA/JCTO	Dept/Institutes	Dept/Institutes				
sdd	Reporting/Analysis	Reporting/Ana	Ilysis Reporting/Analysis	Reporting/Analysis	Reporting/Analysis	Analytic Support				
Specialized Services/Apps	Revenue Cycle System	HR System	s Classroom Systems	Clinical Res Admin	i2b2	Custom programming				
d Serv	EMR	Finance/Bud	get Course Management	Grants/Res Admin	Custom Programming	Genomic Pipelines				
ecialize	I/F Engine/TruData	I/F Engine/Maste	er Data Student Info Systems	Master Data Sync	Data Integration Svc	Custom Scrips				
Spe	Data Warehouse	Data Wareho	use Data Warehouse	Data Warehouse	ARCH	Scheduling and Optimization				
	Cloud Vendor Manager	HPC Storage/Clusters								
a a) (Tier 1 Support / Pro	ject Management/ Client Services						
ructur		Des	ktop Management/ Mobile Device N	lanagement/ Shared Productivity Ap	oplications (o365)					
Infrastructure										
Core I			Network	< and Communications						
			Security/ Identit	ty/ Disaster Recovery Planning						
	Institutional Policy									

WCM SAP Landscape



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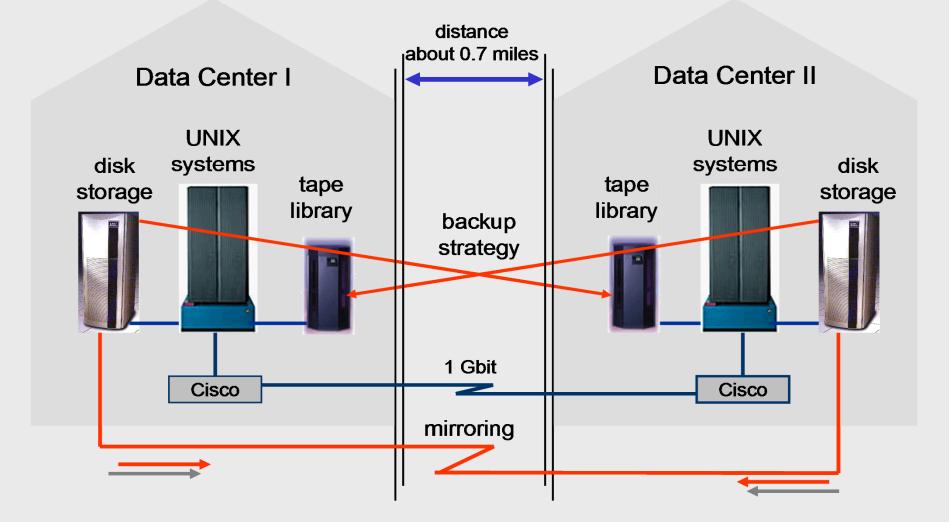
WCM SAP Landscape Contd..

- ➢ ECC 6.0 EHP 7
- ≻ BW (NW 7.4)
- ➢ Enterprise Portal (NW 7.4)
- Supplier Relationship Management (SRM 7.3)
- Process Integration (PI NW 7.4)
- Governance Risk and Compliance (GRC 10.1)
- Business Objects 4.2
- Master Data Management
- ➢ Solution Manager 7.0

WCM SAP Landscape Contd..

Total number of Servers / Instances in the SAP Landscape:									
	Non-PRD	Production							
System	Servers / Instance	System Servers / Instan							
ERP	6	ERP	3						
BW	7	BW	3						
SRM	5	SRM	1						
PI	3	PI	1						
Solman	2	Solman	1						
Web.Disp	3	Web.Disp	3						
SLD	1	SLD	1						
Portal	4	Portal	1						
BOBJ	3	BOBJ	1						
Total	34	Total	15						

WCM SAP Landscape Contd..



WHY?

Why HANA?

- Performance Issues
 - Transaction Processing too slow
 - Data Extracts to BW/BI takes a lot of time
 - Reporting too slow
- High Operational Overhead
- Hardware Revamp
- Contract Renewal
- No Change Management Involved
- Embrace Technology changes for the Future
- Improve User Experience

Why HANA Enterprise Cloud?

- Partnership with SAP Management
- No Basis Team Ramp up
- Customer references for SRM on HANA?
- Standalone Disaster Recovery setup
- Single point of contact Migration to Product Support/Development

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Project Scope

- Setup WCM HANA and ASE System Landscape
- Migrate All SAP Systems from prior hosting provider to SAP HEC
 - OS/DB Migration
 - Validate/Test

Install New Dimension Components

- Lumira
- Gateway Servers for FIORI
- Data Services
- > HANA DataMart
- Setup standalone Disaster Recovery for all Prod systems

Project Scope Contd..

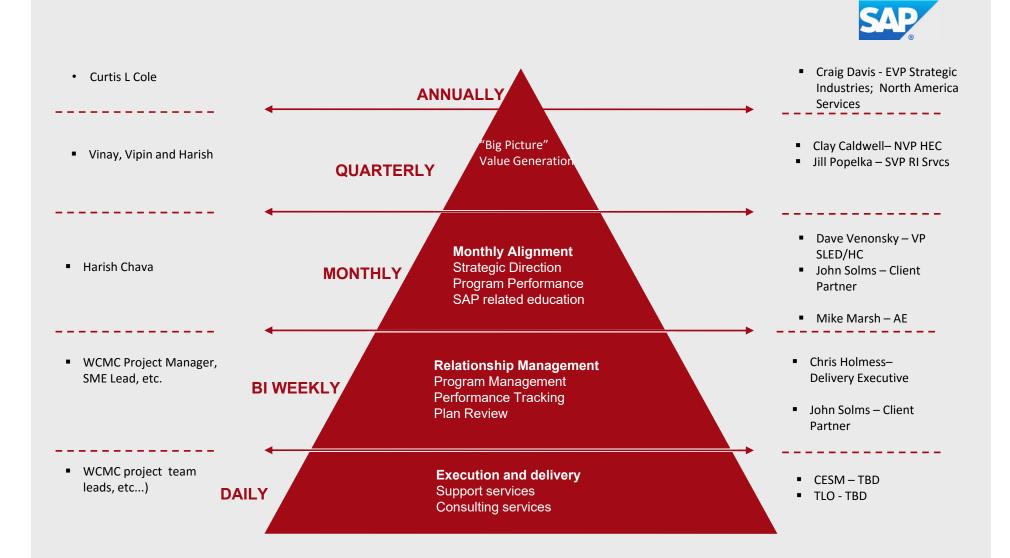
Migration	Greenfield Implementation
ECC 6.0 EHP 7	Solution Manager 7.1
BW (NW 7.4)	Data Services
Enterprise Portal (NW 7.4)	FIORI
Supplier Relationship Management (SRM 7.3)	Lumira
Process Integration (PI NW 7.4)	DataMart
Governance Risk and Compliance (GRC 10.1)	BSI Tax Factory
Business Objects 4.2	System Landscape Directory
Master Data Management	

Project Scope Contd..

Component	Database	Tier		DR
SAP ECC	HANA	6 (SBX, DEV, QA, PRE-PROD, Prod, TRN)	Migrate	Yes
SAP BW	HANA	6 (SBX, DEV, QA, PRE-PROD, Prod, TRN)	Migrate	Yes
SAP BW-Java	ASE	6 (SBX, DEV, QA, PRE-PROD, Prod, TRN)	Migrate	Yes
Enterprise Portal	ASE	6 (SBX, DEV, QA, PRE-PROD, Prod, TRN)	Migrate	Yes
SAP SRM	HANA	6 (SBX, DEV, QA, PRE-PROD, Prod, TRN)	Migrate	Yes
Process Integration	tion ASE 4 (SBX, DEV, QA and Prod)		Migrate	Yes
GRC	ASE	4(SBX, DEV, QA and Prod)	Migrate	Yes
Business Objects	ASE	5 (SBX, DEV, QA, Prod and TRN)	Content Migration	Yes
MDM	ASE	2 (Non-PROD, Prod)	Migrate	Yes
Data Services	ASE	3 (DEV, QA and Prod)	Install	Yes
Solution Manager	ASE	2 (Dev and Prod)	Install	Yes
FIORI	ASE	4 (DEV, QA, Prod and TRN)	Install	Yes
Lumira	HANA	6 (SBX, DEV, QA, PRE-PROD, Prod, TRN)	Install	Yes
DataMart	HANA	2 (Dev & Prod)	Install	Yes
DNS		2 (Primary & DR Location)	Setup	Yes

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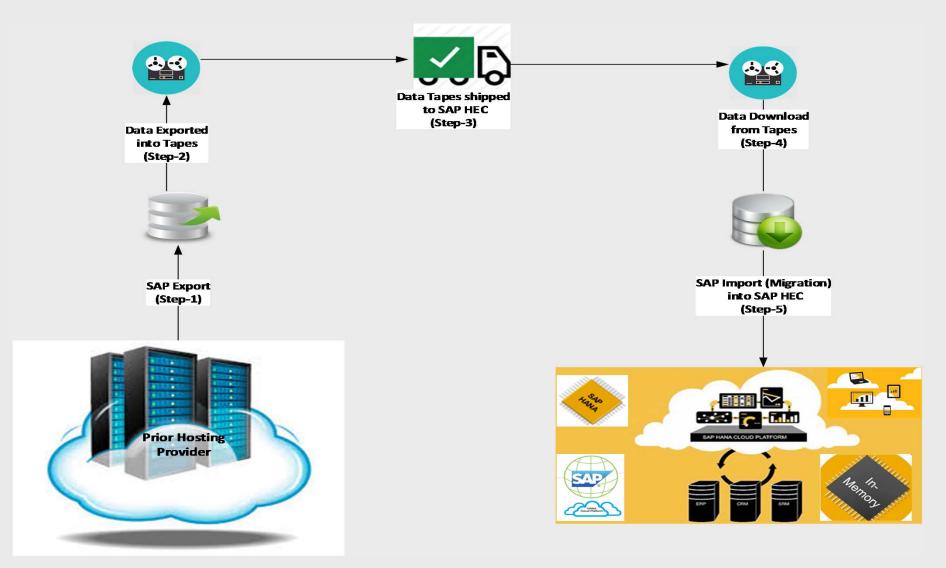
GOVERNANCE MODEL



Project Schedule

		Month		Oct	t '1 4			Nov				ec'1				n '15			Feb				ar '1	
	Cycle	Week	10/13/14	10/20/14	10/27/14	11/03/14	11/10/14	11/17/14	11/24/14 12/01/14	12/08/14	12/15/14	12/22/14	12/29/14	51/50/TO	01/19/15	01/26/15	02/02/15	02/09/15	02/16/15	02/23/15	03/02/15	03/16/15	03/23/15	03/30/15
		Project Week	1	2	3	4	5	6	7 8	9	10	11	12 1	.3 1	.4 15	16	17	18	19	20	21 2	2 2:	3 24	25
OS/DB Migration by SAP																								
SBX - Cycle 1	SAP+WCMC	Project Prep/HEC Prep																						
	SAP	Migration to HEC																						
	WCMC+SAP	Integration+Code Remediation																						
	WCMC+SAP	Technical Validation																						
	WCMC	Functional Testing								k														
DEV - Cycle 2	SAP+WCMC	Project Prep/HEC Prep							_															
	SAP	Migration to HEC						7																
	WCMC+SAP	Post Migration+Code Remediation																						
	WCMC+SAP	Technical Validation																						
	WCMC	Functional Testing/Validation									7	Z												
QAS - Cycle 3	SAP+WCMC	HEC Prep									L													
	SAP	Migration to HEC																						
	WCMC+SAP	Post Migration+Integration																						
	WCMC+SAP	Technical Validation																						
	WCMC	UAT/Regression Testing														7	2							
TRN - Cycle 4	SAP+WCMC	HEC Prep																						
(*Only ERP, SRM & EP)	SAP	Migration to HEC													$\overline{\mathbf{Y}}$									
	WCMC+SAP	Integration between ERP, SRM, EP																						
	WCMC+SAP	Technical Validation														7	2							
Mock - Cycle 5	SAP+WCMC	Project plan validation & HEC Prep																						
	SAP	Migration to HEC on PRD Hardware																						
	WCMC+SAP	Integration Validation																						
	WCMC+SAP	Testing																2	7					
PRD - Cutover	SAP+WCMC	HEC Prep/validation before cutover																						
	SAP+WCMC	Final Prep																	7					
	SAP	Migration Cutover																						
	SAP+WCMC	Validation + handoff to Project Team																			22			
Post Go-Live Suport	SAP	Support																						

Migration Approach



Testing Strategy

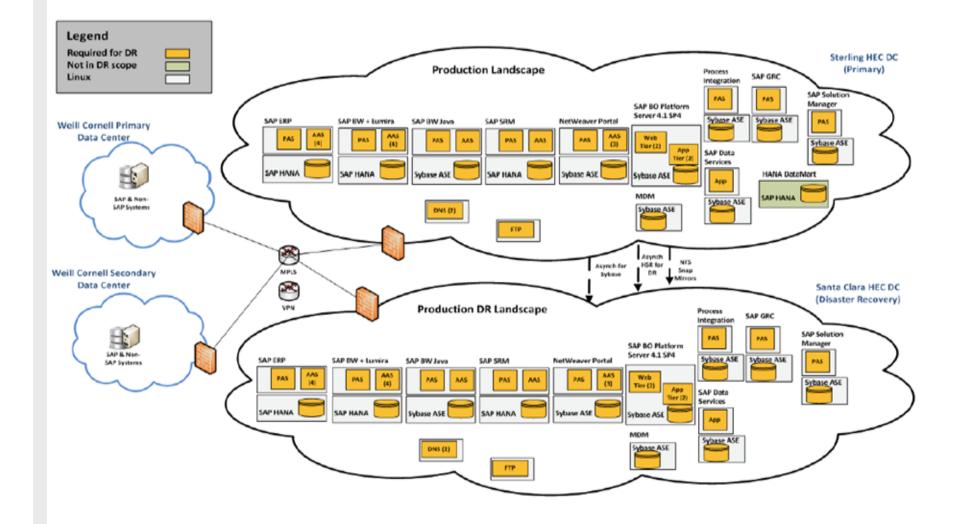
Testing Cycle	Environment	Responsible
Unit Testing - First Round	Sandbox	Testing Team/BA's
Unit Testing - Second Round	Development	Testing Team/BA's
Integration Testing	Quality	Testing Team/BA's
User Acceptance Testing	Quality	SME's
Load/Stress testing	Mock/Prod	Testing Team/BA's

High Level Cutover Milestones

Milestone	Start Time	End Time
Go/No-Go Meeting	03/24/2015 09:00	03/24/2015 10:00
Lock All End Users	03/25/2015 17:00	03/25/2015 17:15
Pre Checks and Pre Migration Activities	03/25/2015 17:15	03/26/2015 02:00
Downtime / Migration	03/26/2015 02:00	03/28/2015 21:00
Technical Validation Including the Fixes and Transports	03/28/2015 21:00	03/29/2015 8:00
Functional Validation (Uncommitted Transactions)	03/29/2015 08:00	03/29/2015 10:00
SME/User Validation Qatar (Committed Transactions)	03/29/2015 07:30	03/29/2015 11:00
SME/User Validation NY (Committed Transactions)	03/29/2015 10:00	03/29/2015 13:30
Go/No-Go Meeting	03/29/2015 14:00	03/29/2015 14:30
BI Batch Jobs	03/29/2015 14:00	03/29/2015 18:00
SME/User Validation NY (BI Report)	03/29/2015 18:00	03/29/2015 21:00
System Release to Qatar SMEs	03/29/2015 11:30	03/30/2015 02:00
System Release to Qatar all users	03/30/2015 02:00	
System Release to all Users	03/30/2015 09:00	



SAP HEC System Landscape



Challenges

- > Annual upgrade followed by HEC Migration
- Support Pack stack prerequisites
- System ID Changes
- Network Setup
- BI Java not supported on HANA
- Included additional Mock Cycle before Production Migration
- Third Party components support on HANA/ASE (BSI)
- Interface Testing

Post Migration Benefits

Infrastructure

- Availability
- Scalable
- Standalone Disaster Recovery

Performance

- Drastic reduction in Reporting runtime
- > 70% Reduction in Data extraction time (Daily Batch)
- 40% Improvements in Payroll processing time

Operational improvement

- Reduction in Batch Monitoring
- Reduction in Batch failures due to hardware resource constraints
- Reduction in Operational support

Post Migration Benefits – Data Extracts

ETL Jobs	Record Count	Pre HANA	Post HANA
Daily	7,386,387	12 Hrs. 06 min	2 Hrs. 38 min
Weekly	2,978,612	12 Hrs. 38 min	1 Hrs. 52 min
Ad hoc	424,312	15 Hrs. 22 min	26 min

Things To Consider

- Detailed Vendor Evaluation
- Management Ownership
- Impact Analysis
- Extensive Project Planning
- Architecture Design
- Define Roles Upfront
- Timely Decisions
- Coordination between all parties involved
- Appropriate Checklists
- Document Issues and Resolutions

WCM Roadmap

- Evolve the Analytic landscape
- > FIORI
- Personas
- Lumira Rollout
- SuccessFactors (Implementation Just started with SAP)
- SAP Budget Planning for Public Sector POC (LSI)
- Epic on HANA
- S/4 Proof of Concept (SAP)
- Master Data Management & Governance
- > Concur

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