Bid Number: SP-18-0087
SAP HANA Upgrade Installation Services

STATE OF ARKANSAS
Department of Finance and Administration

TECHNICAL PROPOSAL - **ORIGINAL**

Submitted to:

Office of State Procurement
ATTN: Shane Phillips
1509 West 7th Street, Room 300
Little Rock, AR 72201-4222

Bid Opening: 04/20/2018 10:00 AM CDT

Submitted By:

YASH Technologies Inc.
605 17th Avenue
East Moline, IL 61244
(610) 613-0901
DUNS: 96-925-3319
TIN: 36-4062778

Contact Person:

David Werner
Sales Director
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Office: (610) 613-0901

Template T-1

Cover Letter and Executive Summary

Response Template

Yash Technologies, Inc.

RFP #: SP-18-0087

Table of Contents

1.0 PROPOSAL SIGNATURE PAGE

Type or Print the following information.

PROSPECTIVE CONTRACTOR'S INFORMATION					
Company:	YASH Technologies Inc.				
Address:	605 17th Avenue				
City:	East Moline	State:	Illinois	Zip Code:	61244
Business Designation:	☐ Individual ☐ Sole Proprietorship ☐ Public Service Corp ☐ Partnership ☒ Corporation ☐ Nonprofit				
Minority and Women-Owned Designation*:	☐ Not Applicable ☐ American Indian ☒ Asian American ☐ Service Disabled Veteran ☐ African American ☐ Hispanic American ☐ Pacific Islander American ☐ Women-Owned AR Certification #: _____ * See *Minority and Women-Owned Business Policy*				

PROSPECTIVE CONTRACTOR CONTACT INFORMATION *Provide contact information to be used for bid solicitation related matters.*			
Contact Person:	David Werner	Title:	Client Partner and Account Executive
Phone:	610-613-0901	Alternate Phone:	
Email:	dave.werner@yash.com		

CONFIRMATION OF REDACTED COPY

☐ YES, a redacted copy of submission documents is enclosed.

☒ NO, a redacted copy of submission documents is not enclosed. I understand a full copy of non-redacted submission documents will be released if requested.

Note: If a redacted copy of the submission documents is not provided with Prospective Contractor's response packet, and neither box is checked, a copy of the non-redacted documents, with the exception of financial data (other than pricing), will be released in response to any request made under the Arkansas Freedom of Information Act (FOIA). See Bid Solicitation for additional information.

ILLEGAL IMMIGRANT CONFIRMATION

By signing and submitting a response to this *Bid Solicitation*, a Prospective Contractor agrees and certifies that they do not employ or contract with illegal immigrants. If selected, the Prospective Contractor certifies that they will not employ or contract with illegal immigrants during the aggregate term of a contract.

ISRAEL BOYCOTT RESTRICTION CONFIRMATION

By checking the box below, a Prospective Contractor agrees and certifies that they do not boycott Israel, and if selected, will not boycott Israel during the aggregate term of the contract.

☒ Prospective Contractor does not and will not boycott Israel.

An official authorized to bind the Prospective Contractor to a resultant contract shall sign below.

The signature below signifies agreement that any exception that conflicts with a Requirement of this *Bid Solicitation* **will cause the Prospective Contractor's proposal to be disqualified.**

Authorized Signature: _____ **Title:** Contract Manager

Use Ink Only.

Printed/Typed Name: Reghu Nair **Date:** April 20, 2018

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2.0 Executive Summary

Instructions: Provide a brief (three [3] to five [5] page) summary of the key aspects of the Prospective Contractor's Technical Proposal. The Executive Summary should include an overview of the Prospective Contractor's qualifications, approach to deliver the services described in the RFP, time frame to deliver the services, proposed team and advantage of this Proposal to DFA.

The operational and technology demands for the State of Arkansas DFA indicate a need for systems and processes that offer a quick and accurate picture of what is happening across departments, agencies and the state. DFA, in support of its strategic directions and initiatives, continues to invest in ways to increase its ability to keep pace with growing demands for services while remaining agile in facilitating responses to evolving needs and opportunities. IT initiatives are providing innovation, integration and collaboration as a way to reduce cost, improve service, and maximize the value DFA deliver among, between, and outside its current organizational boundaries. This emphasis is growing because investing in technology provides the collective power to share information and processes that deliver operational, social, and political benefits given the challenging political and fiscal environments the DFA and State are facing.

Research has shown that organizations that implement enterprise systems and continue to reinvest into complementary, business and IT projects derive accelerating benefits in terms of productivity and performance. This cycle typically gets started with an investment in core enterprise software that simplifies a disparate application landscape into a homogenous integrated platform. SAP has made the commitment to optimizing its application software for this proprietary platform, SAP HANA. SAP HANA is meant to replace the traditional database management system (DBMS) such as Oracle, SQL-Server or DB2 with full database management capabilities and so much more.

YASH Technologies (YASH) is pleased to submit a response to Solicitation SP-18-0087 to provide SAP HANA Upgrade Installation Services for the Department of Finance and Administration (DFA) – Office of Information Services (DFA-OIS). DFA is seeking a partner to obtain services for an on-premise turnkey technical HANA upgrade to the entire Arkansas Administrative Statewide Information System (AASIS) technical ecosystem. This encompasses upgrading the entire AASIS landscape including the on premise ECC systems and the on-premise BW systems, in all landscapes, from an IBM DB2 database backend to SAP HANA backend on appropriate hardware This can only be accomplished through the commitment of dedicated and experienced staff, technical and functional experts, and an engaged and responsive on-site management team supported by executive leadership committed to mission success. YASH is that partner.

YASH is committed to continue building on the investments and achievements of AASIS, and will leverage our understanding of the environments gained through existing Public Sector SAP teaming partners, Genesis Consulting and Plan-B-IT Consulting. The table that follows describes our teams' highlights, experience, and technical capabilities:

Team YASH combines SAP HANA Experience, Best Practices, and DFA AASIS Institutional Knowledge

Company	Technical Capabilities	Relevant Experience
YASH Technologies More than what you think.	• Leading technology services and outsourcing partner with global reach • Over 23 successful SAP HANA Migrations and Upgrades • Multiple SAP Upgrade and OS/DB Migrations • Mature SAP Technical SAP practice with highly experienced SAP consultants • SAP Partner Center of Excellence Certified • SAP S/4HANA System Conversion Certification • ISO 9001, ISO 2008, CMMI Level 5	• Completed over 23 successful SAP HANA Upgrades, Migrations and Conversions • Over 2,500 SAP experienced consultants and 200 HANA certified consultant • Multiple Fortune 500 SAP clients brining commercial HANA platform best practices and lessons learned • Multiple HANA 2.0 Migrations using SAP SUM DMO
genesis CONSULTING	• SAP Certified Services Partner • SAP Public Sector Industry and Certified Solution Experts • Multiple Federal, State and Local SAP implementations, upgrades and migrations • Change management, training, and knowledge transfer specialists • Experts in SAP Lean Thinking Principles and Agile Techniques	• State of Florida Department of Management Services – SAP HANA and Upgrade Roadmap and ECC, HCM, Portal Upgrade • Minneapolis Public Schools – SAP Unicode Conversion, Upgrade, Hardware and Database Migration for ECC, BW, BOBJ, SRM, Portal • USDA SAP BW on HANA • State of Arkansas EASE Project
PLAN B IT CONSULTING	• State of Arkansas Local Small Business • Extensive experience with the current SAP system infrastructure at the State of Arkansas • DFA Trusted SAP partner for AASIS solutions and projects	• AASIS upgrades and enhancements to the SAP infrastructure landscape • State of Arkansas EASE Time and Leave Project • State of Arkansas EASE Procurement Project • State of Arkansas EASE Performance, Goals, and Compensation

Team YASH is committed to providing the very best technical upgrade services aligned to DFA's business goals and strategic vision. We understand DFA's future plans for scaling the AASIS functional and business capability; and that providing existing staff with the knowledge and new tools to support the HANA platform is as important as the migration itself. Contracting with a team who doesn't know the State's environments or is only focused on the technical aspects of the project, will put DFA's future goals at significant risk.

Team YASH offers a low risk solution based on continuity of resources and a team with institutional knowledge paired with best practice implementation experience. Our technical experience, combined with team members with in depth knowledge of Arkansas, Federal, State, Local and Commercial SAP Best Practices, will help DFA successfully migrate ASSIS ECC and BW to HANA, establish a future platform to streamline processes, and gain optimal return on investment on the technology.

We place an emphasis on teaching and training the new SAP HANA skills we will deliver to existing State employees responsible for maintaining AASIS after HANA is implemented. The benefits of our team include:

- **Key Personnel** with over 12 years of total SAP HANA migration experience that bring lessons learned to avoid technical risk, and provide leadership, mentoring and technical oversight for the State's project team.
- **Understanding of the environment,** and the operational and tactical challenges aligned with the strategic objectives of DFS are gained through 6 years of combined experience supporting AASIS. Our unique combination of SAP HANA, Basis, NetWeaver, OS/DB, ABAP, Basis, Training, and SAP functional solution skills will help assist the DFA in achieving its HANA upgrade goals and objectives and perform all tasks outlined in the RFP.
- **Experience** at over 100 SAP HANA clients along with multiple SAP Public Sector upgrades at other States, coupled with our knowledge of the current ASSIS environments, lends to significant understanding of the DFA HANA migration requirements, the SAP ECC and BW technical environment, agency training and support needs, to maintain HANA long after the migration.
- **Best practices** through experience and certifications such as SAP Partner Center of Excellence, SAP Certified HANA Conversion, ISO 9001, ISO/IEC 2008, and CMMI Level 5 that can help DFA mature its SAP HANA capability and optimize tools, process, and resources to save cost, time, and increase the DFA AASIS Basis functions to resolve more issues at the technical infrastructure and OS/DB level.
- **Lowest technical risk** to DFA with commitment of our experienced, verified Key Personnel project staff, our AASIS SMEs Karl Foss and Chetan Nanguralia, and teaming partners with extensive knowledge and hands-on experience of SAP HANA, Upgrades, Migrations, Testing, Change Management, Knowledge Transfer, and Technical/Functional Support.

Team YASH has helped many customers embrace the journey toward new SAP Digital Core and Implementing SAP HANA, while ensuring Best Practices are followed. Reimagining business processes and bringing value to our customers have been our delivery hallmarks.

Arkansas Objectives	Team YASH Solution and Value Propositions
Upgrade SAP ECC and BW On-Premise Systems from IBM DB2 Database to SAP HANA Backend	• YASH will position, a blend of Associates with expertise in end-to-end Implementation Methodologies, SAP Best Practices, Experience in SAP HANA DB Upgrades (75K hours of implementation experience) & Domain. • Our Accelerated HANA Migration Implementation model has the right blend of solution components and enablers to ensure synergies and efficiencies across digital work place and collaboration modules. • Our Partnerships with SAP + Lessons Learned (40+ Key Learnings) from various SAP HANA DB conversions will bring forth an Implementation with clear visibility on all the deliverables, project status & outcomes that are expected. • Our Market credentials include: o 2016 Forrester report – Player of significance in "Digital Core" Technologies & SuccessFactors o Gartner Market Guide for Mid-Market SAP Service Provider 2015 o Gartner Magic Quadrant for SAP Implementation Service Providers, Worldwide 2014

YASH, a thought leader in the SAP space, has contributed to a number of customer initiatives as they navigate through their Digital journey. YASH, along with SAP, has developed a S/4 HANA Cloud Mobile Inventory Manager App, which is currently available on the SAP App Center. Our Rapid Deployment Solution in SAP SuccessFactors is a SAP Qualified Solution. Our other pre-configured solutions in various industry verticals include PeopleOne, ManufacturingOne, ChemOne, TechOne, WholesaleOne, CPGOne, ServicesOne, PlasticsOne and FinancialsOne. YASH is among the elite few consulting companies to represent SAP in delivering Cloud based consulting solutions.

Brief Overview of YASH:

- Leading IT service provider of Digital, Application and Infrastructure Services, globally
- 22 years of strong experience in consulting, technology & outsourcing services
- Global Headquarters in East Moline (IL), USA; 30 Global delivery centers spread across 6 continents
- 4,500+ work force, with low attrition rate
- "Partner of Choice" for 350+ large enterprise and midsize customers
- $225+ M in revenue, financially sound, profitable & debt-free organization
- Ability to invest in Competencies, Assets & Relationships has helped us maintain long term relationships with our customers
- Strategic acquisitions of four companies during the last two years – Regional (UAE & UK) & Vertical focused has strengthened our services globally across multiple domains – BFSI, Health Care, Oil & Gas, Lifesciences, etc.
- Recognized and Awarded "Great Place to Work" (2015, 2016, 2017) & AON-HEWITT-Best Employers (2016, 2017)

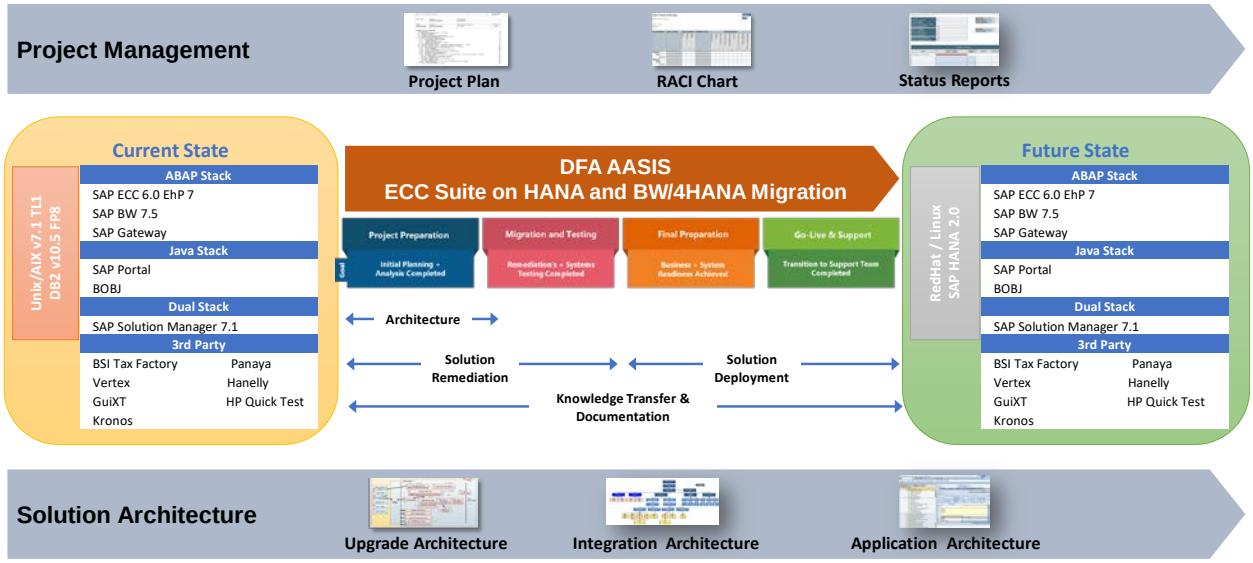
- Deliver all major services including AMS, IMS ADM, Implementations, Upgrades, Developments, Migrations, and Strategic Consulting across our Comprehensive Service Portfolio, which consists of Digital Services, Packaged & Custom Applications, Infrastructure Management Services, Cloud Transformation Services, Quality & Testing services, etc.
- As a Microsoft GOLD Certified Partner in Application Development, Collaboration & Content, leveraging the experience from 200+ projects executed and Microsoft CoE, YASH has been delivering solutions in various arenas of Microsoft Solutions related to – Application, Collaboration, Cloud and Database.
- CMMI Dev 5, ISO 9001, ISO 27001 & SSAE Type I & II certified Organization, with robust Business continuity process & Disaster Recovery plan (with multi intra-city & Inter-city DR sites).
- Customer Satisfaction, Revenue Growth & Innovation are the strategic focus areas of YASH. We target to grow to $1 billion USD company by 2020. Our future strategies for growth are:
    - Enhance our delivery capabilities & capacity in US (New jersey NJ, Texas TX, Massachusetts MA, California CA), Europe (UK, Germany, Sweden), Middle East & Asia-Pacific (Australia & Singapore)
    - Major investments around cloud technologies (SaaS, PaaS), Advanced Analytics, Data Sciences, IoT, RPA.
    - Continue to focus on Life Sciences, Chemicals, Automotive, Agri-Manufacturing, Utilities & Public Sector while strengthening emphasis on Banking, Insurance and Retail
    - Transformational Managed Services across Application, Digital and Infrastructure Services

Below is a snapshot of our HANA Capability, including the SAP HANA portfolio of services that we provide:

- 25+ HANA Projects / Customers being supported Globally, which includes 10 Migration/Upgrade Projects
- 250+ HANA certified consultants
- 1500+ Fiori Apps deployed for 35+ Customers
- Solution Assessments, Discovery Workshops, Strategy Sessions,
- SAP HANA sizing and Architecture
- Big Data on SAP HANA through integration with Hadoop
- SAP HANA migration
- S/4 HANA Central Finance
- HANA Cloud solutions

Approach to Deliver Services

Team YASH has over 22 years of experience implementing, upgrading, migrating, outsourcing and supporting large complex SAP programs including 23 recent HANA projects. We have gained extensive SAP HANA 2.0 Migration and application knowledge and bring our proven and repeatable approach to the DFA AASIS HANA Migration project. We acknowledge that the AASIS SAP ECC Suite on HANA and BW/4HANA migration is a complex process. This project affects business users, technical staff, Departments and Agencies and third parties integrated with AASIS. Team YASH works with DFA counterparts to define a migration strategy and technical approach that focuses on reducing risk. Our approach focuses on removing the technical risk and guesswork out of the migration through our proven approach, so DFA can focus on getting its people and organization ready to support the new HANA platform long after Go-Live. An overview of our approach for the DFA AASIS HANA Migration is depicted below:



DFA AASIS ECC Suite on HANA and BW/4HANA Approach

YASH is pleased to suggest a migration approach in the following phases:

- Unicode Conversion in SAP ECC system
- Upgrade of SAP ECC 6.0 EHP7 to Business Suite on HANA
- Migration of SAP BW 7.5 system to SAP BW/4HANA

After careful analysis of the DFA requirements listed in the RFP, our technical team considered all the available for ECC Unicode Conversion [UC] and HANA Upgrade, and Team YASH recommends option of ECC UC and HANA Upgrade using DMO with system move. Based on our team's analysis of the DFA's BW system, and from the available options for the DFA AASIS BW/4HANA migration, Team YASH recommends SAP BW/4HANA In-Place Conversion Approach – which is similar to the Suite on HANA migration using SUM DMO.

Timeline to Deliver Services

Our analysis of the State's envisioned HANA Implementation strategy is based on our knowledge of DFA and the as well as our vast experience and knowledge of how to best implement large, complex SAP HANA business transformation projects. We have embedded our best practices into Team YASH's methodology and Implementation Plan to help guide us on how best to approach such multi-dimensional engagements as the AASIS Suite on HANA and BW/4HANA projects. This method, based on experience from many global SAP rollout projects, was developed by our own proposed Key Personnel to provide guidance to our team on how best to implement the HANA database, with the least amount of risk, while preparing DFA to maintain it long after the migrations.

Overall, we agree with your milestones and timeframe as outlined in the RFP. We have made some minor modifications to the interim milestones, but delivers the Suite on HANA and BW/4HANA projects within the proposed Go-Live timeframe of November 22nd to 25th.

- The Unicode Conversion and Business Suite on HANA migration is estimated to take 25 weeks, with a Go-Live planned on November 25th and requiring 5,400 labor hours.
- Migration of SAP BW system to BW/4HANA is estimated to take 23 weeks, with a Go-Live planned November 11th and requiring 3,380 labor hours.

Proposed Team YASH

The team of consultants that Team YASH is proposing to the State of Arkansas for the SAP HANA and BW Migration project brings on average over 15 years of SAP experience with nearly 12 years of experience implementing SAP Public Sector Solutions. Our team brings depth and strength in all the key areas we feel DFA will want to provide special attention as we work through the SAP HANA and BW migration. Some of the areas our team has specific expertise and experience are around the technical requirements for implementing an SAP Suite on HANA environment, migrations from ECC to HANA, and the design, configuration, integration and testing of SAP Public Sector solutions including Financials, Controlling, Funds Management, Logistics and Human Capital Management.

Our proposed team also has experience implementing SAP solutions at the State of Arkansas including the EASE Time and Leave Project, EASE Procurement Project, and EASE Performance, Goals, and Compensation implementation.

Together, Team YASH has had significant accomplishments during their SAP implementation careers. Our team includes skilled consultants that have incredible achievements and accolades. DFA will be able to leverage this extensive experience and impressive talent. Some of the outstanding credentials from the proposed team include:

- Experience with 20+ HANA upgrades/implementation projects
- 8 SAP Certified consultants with 4 SAP HANA certified team members
- Our team has worked on 10+ BW implementation/upgrade projects
- Our SAP Project Managers have managed over 35+ projects and over 400 personnel
- Average 13+ years of SAP experience with a total of 50+ years SAP experience

Team YASH's experience led us to understand one of the most important factors for successful HANA implementation project—success is so much more than simply getting the software to "work." Over the last 22 years, Team YASH has implemented hundreds of SAP projects and HANA migrations, including 23 HANA 2.0 customers. Team YASH brings this experience to DFA. Our proposed solution considers these experiences, which we have already incorporated throughout our proposal. The combination of our unique knowledge of the DFA AASIS environments and our SAP HANA implementations in the public and private sectors reduces risk and delivers a maximum quality Suite on HANA and BW/4HANA implementation.

3.0 Prospective Contractor Contact Information

Instructions: Complete the following information regarding the Prospective Contractor's organization. Do not change any of the completed cells. Any changes to the completed cells could lead to the disqualification of the Proposal.

Table 1. Prospective Contractor Profile

PROSPECTIVE CONTRACTOR ORGANIZATION PROFILE	
Name of Parent Company	YASH Technologies Inc.
% of Revenue from State and Local Government Clients in the United States	< 1%
Number of Years in Business	22 Years
Number of Years Prospective Contractor has been Providing the Type of Services Specified in the RFP	20 Years - SAP ERP Upgrades and Migration, 5+ Years of SAP HANA upgrades and migration
Number of Employees Providing the Type of Services Specified in the RFP	500+

3.1 Subcontractor Contact Information (If applicable)

Instructions: Complete the following information regarding the subcontractor's contact information. If more than one subcontractor is proposed, add more Tables as necessary. Do not change any of the completed cells. Any changes to the completed cells could lead to the disqualification of the Proposal.

Table 2. Subcontractor Contact Information

COMPANY INFORMATION:			
Company Name:	Genesis Consulting Partners, LLC		
Address:	5207 Hickory Park Drive, Suite E		
City, State & Zip Code:	Glen Allen, Virginia, 23059-2624		
Company Type (Check One):	☒Private ☐Public		
Company Size:	37 Employees		
Annual Revenue:	$7,500,000		
PRIMARY CONTACT INFORMATION:			
Name:	Nicholas G. Coticchia	Title:	Chief Operating Officer
Address:	1818 Library Street, Suite 500		
City, State & Zip Code:	Reston, VA 20190		
Phone:	(703) 677-3116	Fax:	(804) 955-4444
E-mail:	nick.coticchia@genesisconsulting.com		

Table 3. Subcontractor Profile

SUBCONTRACTOR ORGANIZATION PROFILE	
Subcontractor Name	Genesis Consulting Partners, LLC
Headquarters Location	Richmond, VA
Date Founded	September 9, 2009
Services to be Provided	• Installation and configuration support of Business Suite and BW/4HANA • Unicode migration update support, for ECC • Installation and configuration support of the current database to SAP HANA • Configuration of existing interfaces • Testing • Knowledge Transfer • Cutover and Go-Live support • Post-Production Support • Documentation • Change Management

Experience of Subcontractor in Performing the Services to be Provided	Genesis Consulting Partners, LLC is an established organization with an extensive history in providing successful software and management consulting services specifically around SAP Solutions, Lean and Agile Solutions, Program Management, Organizational Change Management and Advisory Services. Genesis is a certified SAP Services Partner and is an active member of the America's SAP Users Group. Genesis is also a Member of the SAP Extended Business Program to resell SAP software. With experience in leading large-scale Public Sector SAP implementations since 2009, they have strong working relationships with SAP and are well respected in the Systems Integration community. Their services and approach to each client engagement are focused on cost effectiveness, customer benefit realization, knowledge transfer and risk mitigation. Through senior leadership and hands-on consulting expertise, their team helps organizations promote business effectiveness and efficiency by delivering quality products and services. Genesis Consulting offers clients services from three main offerings: SAP Solutions, Advisory Services, and Lean and Agile Coaching. Genesis brings direct relevant SAP, Upgrade, Basis, Unicode conversion, HANA and migration experience and best practices from many public-sector entities including Federal, State and Local clients. In addition, Genesis brings deep expertise from hands-on technical upgrade and migration projects as well as serving as advisors and IV&V at comparable State Agencies for complex SAP Upgrades. Their unique combination of management and technical SAP skills combined with years of experience working in the Public Sector space will help assist DFA AASIS in achieving its HANA Migration Implementation goals. • Public Sector SAP solution expertise with extensive experience in State and Local government and K-12. • Technical, Financial, Procurement, solution development and extensive client implementation experience • Lead architects and application configuration experts for accelerated best practices solutions
Brief Description and Number of Projects that Prospective Contractor has Partnered with this Subcontractor on	**Project 1: SAP HCM Development and Support** Customer: Pennsylvania Turnpike Commission (PTC) Year: 2017 Duration: 6+ months Description: • Genesis and Yash teamed together to deliver SAP HCM development and support services • This work consisted of integrating SAP-HCM with MS Dynamics, as part of a larger project, reducing manual data entry and increasing efficiencies. • The scope of work included full requirements gathering, design, build, testing, coordination of end-user testing, go-live, support, and documentation.

	Project 2: SAP Application Support Services Customer: Glatfelter Specialty Paper Company Year: 2016 to present Duration: current Description: • Genesis and Yash teamed together to deliver SAP application support services • Support services included Glatfelter's US-based SAP-ECC 6.0 instance and Glatfelter's Europe-based SAP 4.6c instance. • Additionally, the combined team offered functional support and backfill to Glatfleter as they embarked upon the implementation of SAP S/4 • The scope of work included functional and technical support services, with specific responsibilities in managing work requests and break-fix items. Coordination business areas to determine requirements and testing engagement is a critical success factor.
Locations Where Work is to be Performed	Onsite: State of Arkansas Department of Finance and Administration designated project site for the HANA Implementation Remote: US Based Corporate Offices in Richmond, VA and Reston, VA

Table 4. Subcontractor Contact Information

COMPANY INFORMATION:			
Company Name:	Plan B IT Consulting, LLC		
Address:	300 East 3rd - #505		
City, State & Zip Code:	Little Rock, AR 72201		
Company Type (Check One):	☒Private ☐Public		
Company Size:	One Employee		
Annual Revenue:	$1.5M		
PRIMARY CONTACT INFORMATION:			
Name:	Karl Foss	Title:	CEO and Managing Partner
Address:	7436 Oak Ave		
City, State & Zip Code:	Gary IN, 46403		
Phone:	(219) 629-0394	Fax:	N/A
E-mail:	karlfoss@plan-b-it-consulting.com		

Table 5. Subcontractor Profile

SUBCONTRACTOR ORGANIZATION PROFILE	
Subcontractor Name	Plan B IT Consulting, LLC
Headquarters Location	Little Rock Arkansas
Date Founded	July 2012
Services to be Provided	System Integration Services
Experience of Subcontractor in Performing the Services to be Provided	Plan B has extensive experience with the current SAP system infrastructure at the State of Arkansas. During the past six (6) years, Plan B has functioned as the lead system integrator for three (3) strategic modernization projects for the SAP system. These projects required measurable upgrades and enhancements to the SAP infrastructure landscape including new SAP Gateway Components, new Fiori Application Components, new Web Dispatcher components, and SAP Support Pack and Kernel upgrades. See projects below.
Brief Description and Number of Projects that Prospective Contractor has Partnered with this Subcontractor on	State of Arkansas EASE Time and Leave Project – Modernized the State of Arkansas's SAP system to support ESS/MSS Time and Leave. SAP Fiori Applications were implemented to support an improved User Experience (UX). During this project, the SAP system infrastructure was upgraded to support the Fiori framework including Mobile Device capabilities. State of Arkansas EASE Procurement Project – Modernized the State of Arkansas's SAP system to support procurement approvals for Purchase Requisitions, Outline Agreements, and Purchase Orders. This Modernization project leveraged the enhanced system infrastructure deployed during the EASE Time and Leave project and included Fiori Applications for an improved UX. Mobile device procurement approval capabilities were also included as part of this strategic modernization project for the State. State of Arkansas EASE Performance, Goals, and Compensation Management Project – Implemented the SAP ECC Performance and Compensation Management modules to support the State's requirements for a new system to support the results of the State's Pay Plan study. During this project, Plan B continued with the Modernization of the State's SAP system. Fiori Applications were development and implemented to provide the State with a full Performance Management solution using a Modernized Fiori Application front-end for an enhanced UX. Mobile device capabilities were also included as part of this strategic modernization project for the State.
Locations Where Work is to be Performed	State of Arkansas designated project site for the HANA implementation.

4.0 Minimum Mandatory Qualifications

The Prospective Contractor must provide clear, compelling justification that it meets all of the Minimum Mandatory Qualifications. The Prospective Contractor is encouraged to provide ample references to information contained in the Proposal that supports its attestation. Prospective Contractor's that fail to provide clear, sufficient evidence that they meet the Minimum Mandatory Qualifications may be subject to disqualification. OSP and DFA may ask for additional clarifications relating to the Minimum Mandatory Qualifications prior to determination of compliance.

Instructions: Complete the following information regarding the Prospective Contractor's ability to meet the Minimum Mandatory Qualifications. Provide specific references to Proposal locations that support the Prospective Contractor's assertions that it meets the Minimum Mandatory Qualifications. Do not change any of the completed cells. Any changes to the completed cells could lead to the disqualification of the Proposal.

Table 6. Minimum Mandatory Qualifications

#	QUALIFICATION ITEM	DOES THE PROSPECTIVE CONTRACTOR MEET QUALIFICATION ITEM?		REFERENCE TO PROPOSAL RESPONSE SECTION
1	The Contractor **must** have previously executed at a minimum two (2) SAP ECC 6.0x systems and Business Warehouse BW 7.x systems migrations to SAP HANA 2.0, preferably in the in Public Sector. (Provide information in Template T-2)	**YES** ☒	**NO** ☐	**2.0 – Prospective Contractor References**
2	Contractor **must** have a SAP Partner Center of Expertise Certification (SAP PCOE certification). (Provide information in Template T-2)	**YES** ☒	**NO** ☐	**2.2 SAP Certification**
3	Contractor's technical staff **must** be SAP HANA certified. (Provide information in Template T-3)	**YES** ☒	**NO** ☐	**3.0 Resumes**

Template T-2

Prospective Contractor Experience

Response Template

YASH Technologies, Inc.

RFP #: SP-18-0087

Table of Contents

1.0 Prospective Contractor Corporate Background and Experience

1.1 Prospective Contractor's Corporate Background

The Prospective Contractor should describe its corporate background to provide context of the organization that will be providing the services in this RFP.

Instructions: Describe the Prospective Contractor's corporate background as it relates to projects similar in scope and complexity to the project described in this RFP.

YASH Technologies (YASH) is pleased to submit a response to Solicitation SP-18-0087 to provide SAP HANA Upgrade Installation Services for the Department of Finance and Administration (DFA) – Office of Information Services (DFA-OIS). DFA is seeking a partner to obtain services for an on-premise turnkey technical HANA upgrade to the entire Arkansas Administrative Statewide Information System (AASIS) technical ecosystem. This can only be accomplished through the commitment of dedicated and experienced staff, technical and functional experts, and an engaged and responsive on-site management team supported by executive leadership committed to mission success. YASH is that partner.

YASH has 22 years of IT consulting, upgrade and outsourcing experience with large, complex IT projects up to $40M in value. YASH successfully completed over 100 SAP technical upgrades, migrations and complex data center moves, 23 HANA projects including SAP ECC and BW on HANA migrations similar in scope and size of DFA's requirements. We have received high customer satisfaction ratings for our large-scale Fortune 500 IT Infrastructure outsourcing clients where we deliver Infrastructure, Basis, Application Management and Support services to complex SAP IT environments, such as John Deere, Stanley Back and Decker, Caterpillar, Charles River Laboratories, Smith & Nephew, Addivant, and Littelfuse. YASH is committed to continue building on the investments and achievements of AASIS, and will leverage our understanding of the environments gained through existing Public Sector SAP teaming partners, Genesis Consulting and Plan-B-IT Consulting. The table below describes our teams' highlights, experience, and technical capabilities:

Team YASH combines SAP HANA Experience, Best Practices, and DFA AASIS Institutional Knowledge

Company	Technical Capabilities	Relevant Experience
YASH Technologies More than what you think.	• Leading technology services and outsourcing partner with global reach • Over 23 successful SAP HANA Migrations and Upgrades • Multiple SAP Upgrade and OS/DB Migrations • Mature SAP Technical SAP practice with highly experienced SAP consultants • SAP Partner Center of Excellence Certified • SAP S/4HANA System Conversion Certification • ISO 9001, ISO 2008, CMMI Level 5	• Completed over 23 successful SAP HANA Upgrades, Migrations and Conversions • Over 2,500 SAP experienced consultants and 200 HANA certified consultant • Multiple Fortune 500 SAP clients brining commercial HANA platform best practices and lessons learned • Multiple HANA 2.0 Migrations using SAP SUM DMO

Company	Technical Capabilities	Relevant Experience
genesis CONSULTING	• SAP Certified Services Partner • SAP Public Sector Industry and Certified Solution Experts • Multiple Federal, State and Local SAP implementations, upgrades and migrations • Change management, training, and knowledge transfer specialists • Experts in SAP Lean Thinking Principles and Agile Techniques	• State of Florida Department of Management Services – SAP HANA and Upgrade Roadmap and ECC, HCM, Portal Upgrade • Minneapolis Public Schools – SAP Unicode Conversion, Upgrade, Hardware and Database Migration for ECC, BW, BOBJ, SRM, Portal • USDA SAP BW on HANA • State of Arkansas EASE Project
PLAN B IT CONSULTING	• State of Arkansas Local Small Business • Extensive experience with the current SAP system infrastructure at the State of Arkansas • DFA Trusted SAP partner for AASIS solutions and projects	• AASIS upgrades and enhancements to the SAP infrastructure landscape • State of Arkansas EASE Time and Leave Project • State of Arkansas EASE Procurement Project • State of Arkansas EASE Performance, Goals, and Compensation

Team YASH is committed to providing the very best technical upgrade services aligned to DFA's business goals and strategic vision. We understand DFA's future plans for scaling the AASIS functional and business capability; and that providing existing staff with the knowledge and new tools to support the HANA platform is as important as the migration itself. Contracting with a team who doesn't know the State's environments or is only focused on the technical aspects of the project, will put DFA's future goals at significant risk.

Team YASH offers a low risk solution based on continuity of resources and a team with institutional knowledge paired with best practice implementation experience. Our technical experience, combined with team members with in depth knowledge of Arkansas, Federal, State, Local and Commercial SAP Best Practices, will help DFA successfully migrate ASSIS ECC and BW to HANA, establish a future platform to streamline processes, and gain optimal return on investment on the technology. We place an emphasis on teaching and training the new SAP HANA skills we will deliver to existing State employees responsible for maintaining AASIS after HANA is implemented. The benefits of our team include:

- **Key Personnel** with over 12 years of total SAP HANA migration experience that bring lessons learned to avoid technical risk, and provide leadership, mentoring and technical oversight for the State's project team.
- **Understanding of the environment,** and the operational and tactical challenges aligned with the strategic objectives of DFS are gained through 6 years of combined experience supporting AASIS. Our unique combination of SAP HANA, Basis, NetWeaver, OS/DB, ABAP, Basis, Training, and SAP functional solution skills will help assist the DFA in achieving its HANA upgrade goals and objectives and perform all tasks outlined in the RFP.

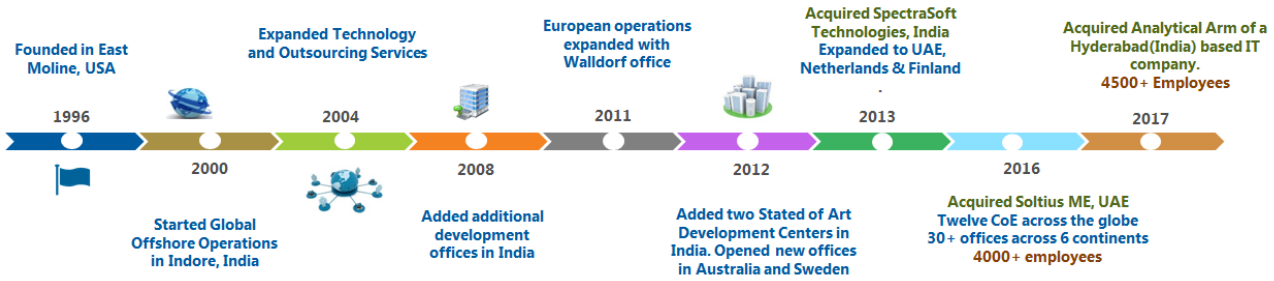
- **Experience** at over 100 SAP HANA clients along with multiple SAP Public Sector upgrades at other States, coupled with our knowledge of the current ASSIS environments, lends to significant understanding of the DFA HANA migration requirements, the SAP ECC and BW technical environment, agency training and support needs, to maintain HANA long after the migration.
- **Best practices** through experience and certifications such as SAP Partner Center of Excellence, SAP Certified HANA Conversion, ISO 9001, ISO/IEC 2008, and CMMI Level 5 that can help DFA mature its SAP HANA capability and optimize tools, process, and resources to save cost, time, and increase the DFA AASIS Basis functions to resolve more issues at the technical infrastructure and OS/DB level
- **Lowest technical risk** to DFA with commitment of our experienced, verified Key Personnel project staff, our AASIS SME Chetan Nanguralia, and teaming partners with extensive knowledge and hands-on experience of SAP HANA, Upgrades, Migrations, Testing, Change Management, Knowledge Transfer, Documentation, and Technical/Functional Support

Corporate Profile: YASH Technologies, Inc. (YASH) established in 1996 with world headquarters in East Moline, IL, USA is a leading technology services and outsourcing partner with global reach. It is a profitable, debt-free and financially sound organization with 250+ million USD in revenues. We have the ability to invest in - building competencies, infrastructure and assets on a global scale for our strategic partners. This combined with our customer-centric and flexible approach and strong business/domain knowledge has ensured that we have “consistently delivered beyond the nitty gritty of contracts” in the spirit of customer business value. This has also enabled us to become the “Partner of Choice” for 300 Mid-Market and large enterprise customers which includes 20 Fortune 500 Companies as well.

With about 4500+ highly skilled workforces, 30 offices across 6 continents and 15 delivery centers, YASH Technologies has been growing at 25% CAGR over the last 5 years, continuously year on year.

In 2017, YASH has been appraised as SET CMMI (Level 5) and recognized by Great Place to Work® Institute as a ‘Certified Great Place To Work’, and World HRD Congress 2017 ranked us 53rd in the prestigious list ‘Dream Companies To Work 2017.

We are awarded distinctly in 2 special categories, ‘Best in Fun at Work’ & ‘Best Use of CSR Practices’. While in 2016, “AON Hewitt” recognized YASH to be among the Top 25 employers in India (across industries) and “Great Place to Work” named us among the Top 50. The YASH Foundation contributes towards supporting the underprivileged, as part of a dedicated effort towards community development.



YASH Journey

We have emerged as an IT Services player of consequence in all geographies that we operate in with our broad Services Portfolio. The graphic below shows a quick snap shot of our portfolio of IT Solutions.

YASH is looking forward to becoming a strategic partner of the State of Arkansas and we believe we can become its preferred "Partner of Choice."

Customer Centricity, Flexibility and Agility: 3 Hallmarks of YASH's approach to business ensures that the Services provided will be delivered that would be scalable, quality driven and cost effective with minimum risk.

Strong focus on Quality Processes: YASH is a CMMi Level 5 Certified Organization. This is a catalyst and enabler in the delivery efforts.

Global Delivery Model: A global delivery model providing services from Onsite and Nearshore, delivery modelled as per CLIENT's requirements, leveraging a judicious combination of delivery and resource model that best suits the requirement to maximize coverage and lower cost and risk.

Strong Resource Pool: YASH has a strong pool of over 2200+ certified SAP practitioners, that enable us to execute large projects with low risk and cost.

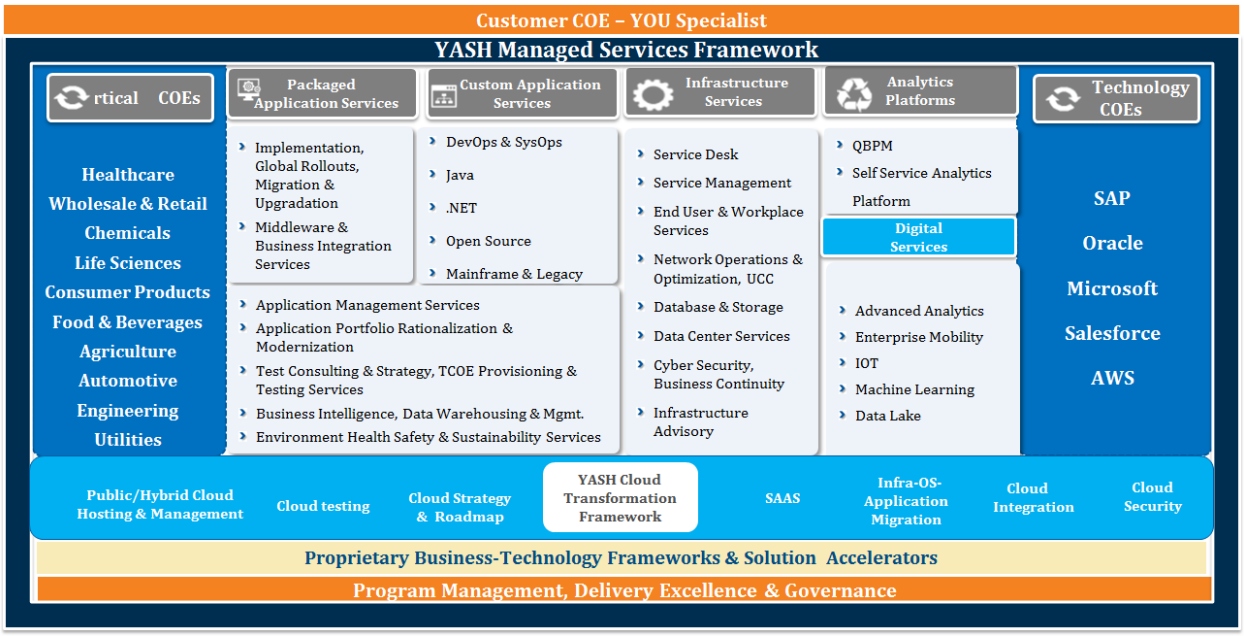
Regional Partner with Global Presence: While YASH is a global company with presence across the six continents we have a strong local presence.

Program Management: In addition to these above, YASH has Management certified consultants (PMP, ITIL) who ensure Program Governance and Relationship Management with our client. The Project Manager will be the primary person for commination, status managements, project delivery, issue management and escalation and as well as responsible for collecting, collating, and reporting on the project status and metrics.

YOU Specialist - CCOE's- Customer Center of Excellence will constitute a pool of Customer business process knowledgeable resources that will be responsible of fixing, designing and proposing any technical decisions about the end to end solution to achieve DFA business objectives in consultation with other Program management team members.

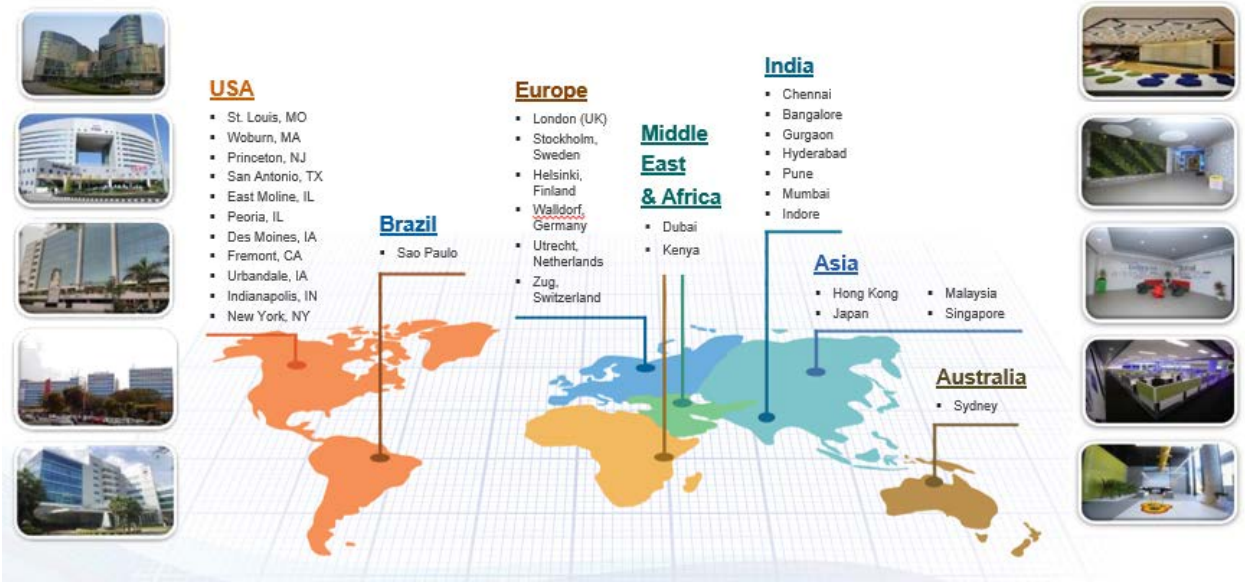
Industry Recognition: Recognized by Gartner's Magic quadrant with SAP certified pre-configured HANA solutions.

We deliver a wide range of solutions and services including developments, implementations, upgrades, rollouts, migrations, enhancements, performance tunings, Infrastructure Services and AMS across solutions / technologies. Leveraging our COEs, our focused service lines and partner alliances, we are uniquely placed to be able to deliver to the DFA AASIS HANA Migration requirements today.



YASH Services

Global Presence



YASH Global Presence

We have presence in 6 continents with 30+ office locations as given below.

Corporate Offices: East Moline (IL), London (UK) and Indore (IND)

Delivery Centers:

USA: East Moline (IL), Des Moines (IA), Woburn (MA), Princeton (NJ), and San Antonio (TX)

India: Chennai, Hyderabad, Bengaluru, Mumbai, Pune and Gurgaon

MENA: Dubai (Soltius ME)

Sales Offices:

USA: Newark (CA), St. Louis (MO), Indianapolis (IN), Fremont (CA)

South America: Sao Paulo (BR)

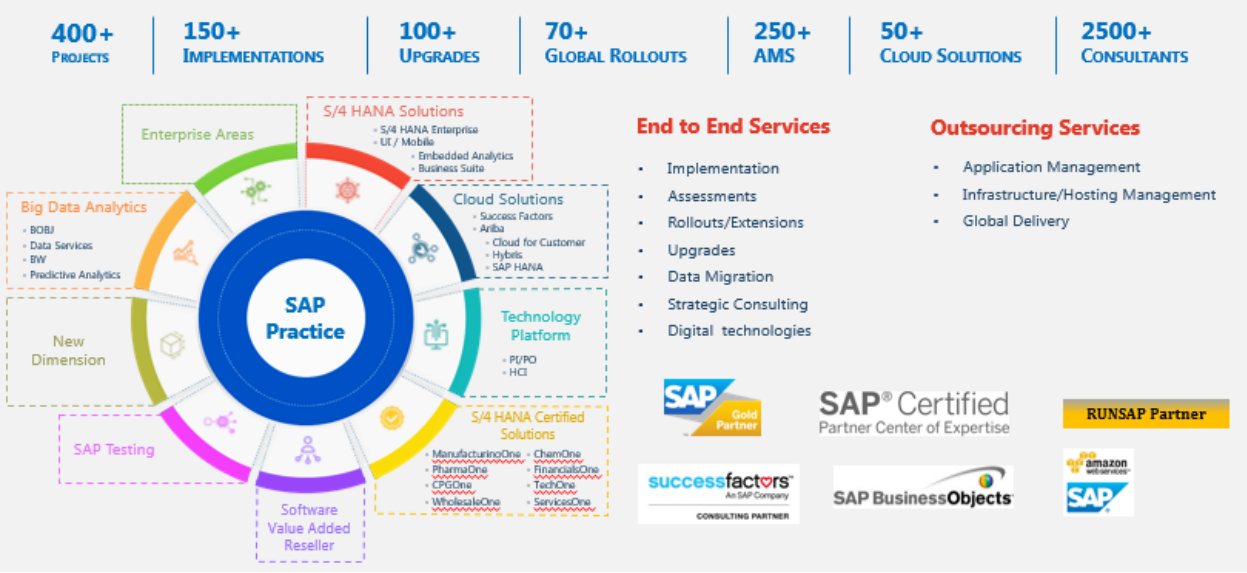
Europe: Manheim (DE), Solna (SE), Utrecht (NL), Helsinki (FI), Sweden

Asia Pacific: Singapore, Malaysia

Australia: Sydney

YASH SAP Practice Overview

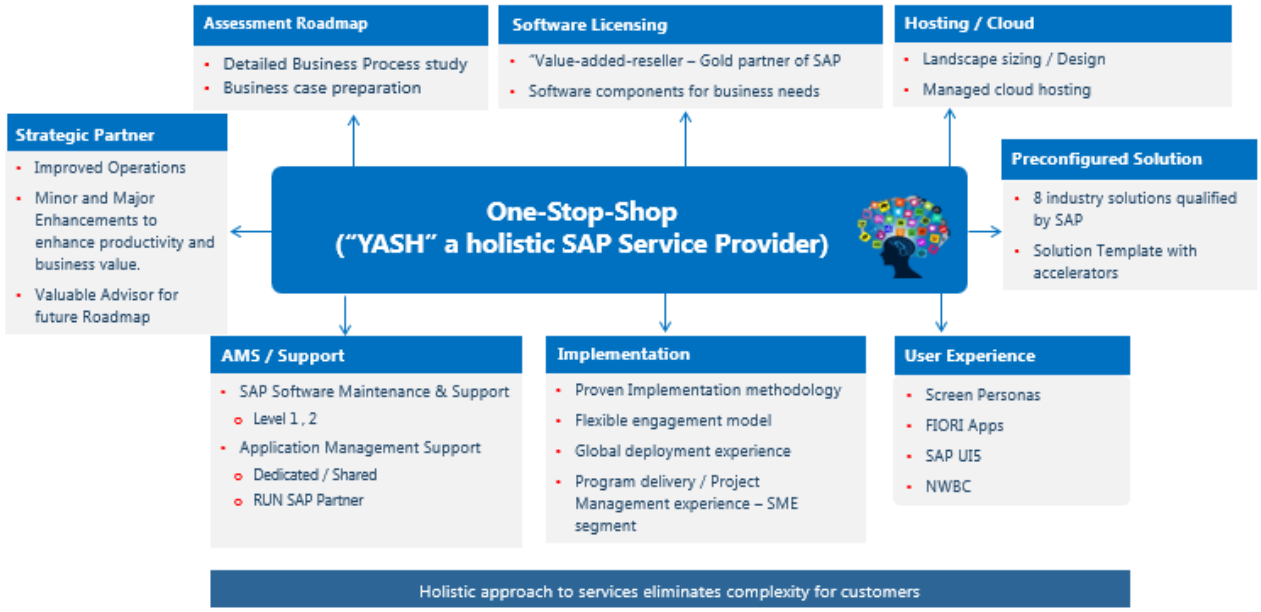
As a long-time trusted SAP Global Partner, YASH offers a complete range of tailored, future-proof SAP services to help customers simplify, innovate, and grow. We deliver the SAP expertise and experience that our clients need to enhance their SAP platforms and to enable leaner and smarter businesses. With specialized SAP resources world-wide, we are positioned to design, implement, and maintain complex SAP engagements, as well as evolve SAP landscapes to achieve the greatest business value. Below is a snapshot of our SAP Practice.



Deep SAP Practice for End-to-End Services

Through our vast portfolio of services and solutions, YASH Technologies helps organizations unlock the vast capabilities of their existing SAP environment to spend less on running the business and allocating more on innovation.

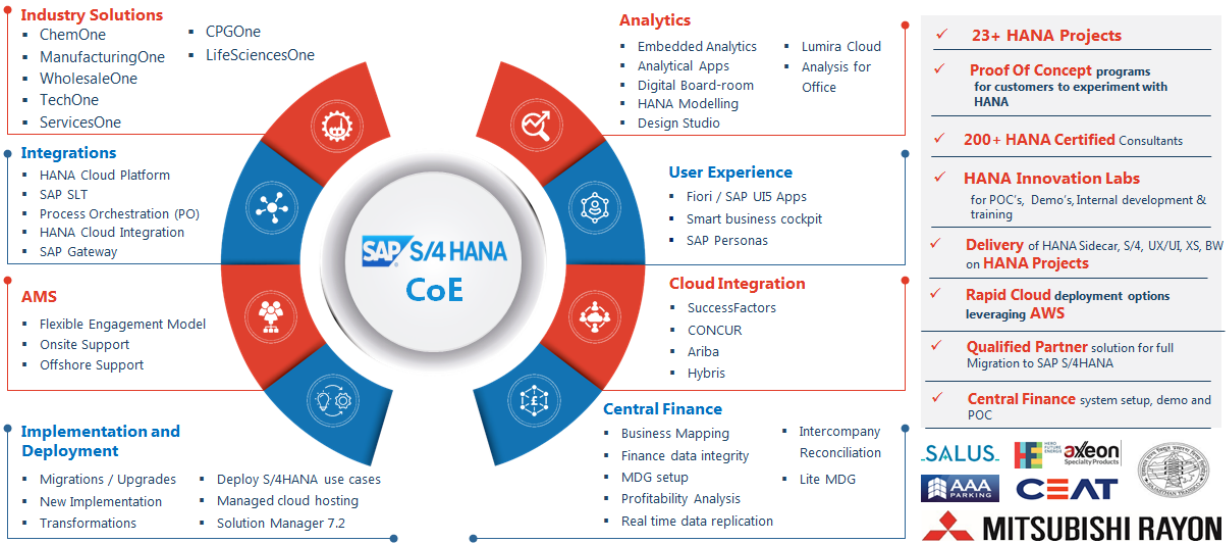
Our end to end Services cover the entire lifecycle of an application and include:



YASH Full SAP Lifecyle Management Services

SAP S/4 HANA Experience

With a complete range of capabilities, YASH provides a fully integrated, highly optimized environment to ensure better results for an SAP HANA initiative. We enable higher business value by deploying next generation applications and analytics with a simplified IT landscape and real-time data. Our services for SAP HANA help organizations exploit data in real time to become more agile. A multilevel SAP partner globally, YASH is uniquely positioned to deliver more value with two SAP HANA labs dedicated to innovation and demonstrations. Below is a snapshot of our HANA Capability.



SAP S/4 HANA CoE

Our Experience and Proven Track Record

Our project teams and consultants offer significant experience and the collective knowledge gained from working together on Commercial and Public-sector Projects. With over 600 successful SAP implementations globally, over 20 HANA projects and 10 plus years delivering SAP projects across numerous Commercial, State, Local, K-12, Higher Education and Public-sector clients in the US, Team YASH has the largest number project successes with SAP and HANA, demonstrating our success implementing solutions of similar scope and complexity as DFA's HANA Migration requirements. A sample of our SAP customers and Upgrade/HANA projects (in bold) are listed below:

Team YASH Relevant Client Experience	• State of Arkansas • **State of Florida** • State of North Carolina • Los Angeles Unified School District • School Board of Broward County • **Fairfax County Government** • **Fairfax County Public Schools** • **Minneapolis Public Schools** • Orange County Public Schools • Brevard Public Schools • Fulton County School District • **Purdue University** • John Hopkins University • Loudoun County Water • City of Houston • City of Toronto • OmniTrans • Birmingham Water • **SAF Holland** • **Shurtape Technologies** • **CEAT Tyres** • **Triveni Turbines Pvt. Ltd.** • **Areej Vegetable Oil & Derivatives** • **Admina Health LLC.** • **AAA Parking** • **Albaugh LLC.** • **Axeon Specialty Products**	• Defense Intelligence Agency • USDA – Foreign Agricultural Service • USDA – Farm Services Agency • **USDA – Nation Finance Center** • **USDA – Forest Service** • Department of Interior • Lockheed Martin • Dyncorp • General Dynamics • Ford Motor Co. • Marel • Amerisource Bergen • Indivior • Union Pacific • Coca Cola • Actavis • MasTec, Inc. • Serco NA • CSC • Xerox Corporation • CACI • Harris Corporation • Nike • Lumber Liquidators • **SPATCO** • QVC

Specific Project-Level Examples

Bringing together the multi-faceted aspects of managing resources, processes, integration and technologies to deliver SAP solutions of enduring value is a core competency of Team YASH. The combination of technical competency and demonstrated capacity to accomplish complex business transformation with HANA perfectly with our broad and deep capabilities. There are many vendors who just staff IT resources or claim to have implemented typical SAP HANA projects. Only a vendor with the depth and breadth of capability demonstrated by Team YASH, coupled with the deep industry experience, can present qualifications, backed up by project evidence, to successfully deliver the transformational HANA vision expressed in DFA's RFP.

We have implemented numerous successful SAP systems in the Public and Commercial Sector, bringing extensive insights from successful HANA migration implementations to mitigate known and unforeseen risks for our clients. We are proud to have implemented SAP HANA for more than 25 Commercial and Public-Sector organizations. In addition, we have considerable experience in successfully implementing SAP systems and upgrades within AASIS and bring this unique combination of industry best practices and institutional knowledge of your environments.

Summary of Relevant Engagements Performed						
Client	**SAP ECC Upgrade**	**SAP BW Upgrade**	**SAP HANA 2.0**	**SAP Certified Migration Consultants**	**OCM / Knowledge Transfer**	**Public Sector**
SAF Holland	✓	✓	✓	✓	✓	
Shurtape Technologies		✓	✓	✓	✓	
CEAT Tyres	✓	✓	✓	✓	✓	
Triveni Turbines	✓		✓	✓	✓	
Areej Vegetable Oil & Derivatives	✓		✓	✓	✓	
State of Florida	✓	✓	✓	✓	✓	✓
Minneapolis Public Schools	✓	✓		✓	✓	✓
USDA		✓	✓	✓	✓	✓
State of Arkansas	✓	✓			✓	✓

1.2 SAP HANA Upgrades completed in the Public Sector in the Last Five Years

The Prospective Contractor should list all SAP HANA upgrades that were completed/finished or were active in the last 5 years in the Public Sector.

Instructions: Provide a listing and contact information for all SAP HANA upgrade contracts in the last five (5) years. Denote any that are pending litigation or have been terminated for cause or convenience. Provide the same information for each subcontractor, associated company, consultant and entity that will be involved in any phase of this engagement. Duplicate the table for each entity in the Proposal. Do not change any of the completed cells. Any changes to the completed cells could lead to the disqualification of the Proposal.

Table 1. SAP HANA Upgrades Completed in the Last Five (5) Years

Please find below YASH's HANA upgrade and migration projects completed in last 5 years. YASH bring numerous best practices and lessons learned from managing over 23 HANA projects engagements and a number of them as listed below for Suite on HANA and BW/4HANA similar in size, scope and duration as the scope for the DFA AASIS HANA migration scope.

REF #	ENGAGEMENT NAME	CUSTOMER NAME	CUSTOMER CONTACT	PROJECT DURATION	BUSINESS DISPUTE?	
1	Upgrade and migration from Oracle DB to Suite on HANA (ERP, SCM, BW)	SAF Holland USA Inc.	Scott Wagner +1 616 546-6516 Scott.Wagner@safholland.com	18 Weeks	**YES** ☐	**NO** ☒
2	SAP BW upgrade and migration Oracle database to HANA 2.0 database	Shurtape Technologies LLC.	Mark Lail marklail@shurtape.com +1-828-267-8357	22 Weeks	**YES** ☐	**NO** ☒
3	Suite on HANA migration, Analytics on HANA	CEAT Tyres	Girish Kewalramani +91-022-2493-0621	13 Weeks	**YES** ☐	**NO** ☒
4	SAP ECC 6.0 to SAP SoH migration	Triveni Turbines Pvt. Ltd.	Guruprasad Hubli Guruprasad.hubli@ triveniturbines.com +91-9108015996	12 Weeks	**YES** ☐	**NO** ☒
5	Suite on HANA migration,	Areej Vegetable Oil & Derivatives	Arul S Selvan, aruls@avod.com.om +968-24448039	12 Weeks	**YES** ☐	**NO** ☒
6	Upgrade of SAP BW 7.3 on HANA to SAP BW 7.4 on HANA	TE Connectivity	Kyle Paukert kyle.paukert@te.com +1 (800) 522-6752	14 Weeks	**YES** ☐	**NO** ☒
7	SAP S/4 HANA1503 Implementation (Greenfield)	Hero Future Energies Pvt. Ltd.	Debnath Mukhopadhyay Debnath.mukhopadhyay@ herofutureenergies.com +91- 997-132-2298	20 Weeks	**YES** ☐	**NO** ☒
8	SAP ECC 6.0 My SQL DB to SAP ECC 6.0 HANA DB (SoH)	Salus Financial LLC. (AdminaHealth)	Robert Bull r.bull@adminahealth.com +1 203-561-8263	12 Weeks	**YES** ☐	**NO** ☒

2.0 Prospective Contractor References

To realize the objectives stated as part of the RFP, the State of Arkansas is issuing this RFP to contract with a Contractor who has experience upgrading SAP environments to HANA. As such, the State has established mandatory qualifications that **must** be met in order to submit a proposal to this RFP, see Section 2.3 of the RFP.

To satisfy this requirement, include at least three (3) references (for the Prime Contractor) of projects which are of similar size, complexity and scope to this engagement, that have either completed within the last five (5) years or are active projects. At least two (2) of the references **must** be from HANA 2.0 upgrade projects. Each reference chosen should clearly demonstrate the Prospective Contractor's ability to perform the Scope of Work described in the RFP.

Instructions: Provide the information requested in the Tables below. The Tables may be replicated if the Prospective Contractor would like to include more than three (3) references. Do not change any of the completed cells. Any changes to the completed cells could lead to the disqualification of the Proposal.

Table 2. Reference 1

PROSPECTIVE CONTRACTOR INFORMATION				
Name: SAF Holland USA Inc.		Contact/Name: Rakesh Kumar Thakur		
Project Dates: December 3, 2017- April 6, 2018		Contact Phone: +1 (419) 508 - 3022		
CUSTOMER INFORMATION				
Customer Organization: SAF-HOLLAND USA, Inc. designs, manufactures, and distributes engineered components and systems to the commercial vehicle industry.		Customer Contact Name: Scott Wagner		
		Customer Phone: +1(616) 546 - 6516		
Customer Address: 467 Ottawa Ave Holland, MI 49423		Customer Email: scott.wagner@safholland.com		
		Customer Fax:		
PROJECT INFORMATION				
Total Prospective Contractor Staff:	5 Resources			
Project Objectives: Upgrade and migration from oracle DB to Suite on HANA (ERP, SCM, BW)				
Project Description: Upgrade migration to Suite on HANA (ERPE, SCM, BW) landscape from Oracle DB on Windows OS to HANA DB on Linux OS. HANA Migration using SUM DMO				
Prospective Contractor's Involvement (Role and Scope): • Installation and configuration of Linux OS • Installation and configuration of HANA DB • Migration of ECC, SCM + Livecache and BW+BPC systems from Oracle DB to HANA DB on Linux. • Upgrade ECC EHP 7 to EHP8 SPS7, BW 7.4 to 7.5 SPS8, SCM EHP3 to EHP4 SPS7 HANA Backup Configuration				
PROSPECTIVE CONTRACTOR KEY PERSONNEL ASSIGNED TO PROJECT				
Name: Srinivasa Reddy Boddapati		Role: Project Manager		
Name: Vikram Kankam		Role: BASIS SME/ Technical Lead		
Name: Atul Ashok Sawant		Role: BASIS SME		
Name: Venkatarami Reddy Dundati		Role: BASIS SME		
Name: Narsing Singh Thakur		Role: Linux SME		
PROJECT MEASUREMENTS				
Estimated Start & Completion Dates	From:	November 19, 2017	To:	March 24, 2018
Actual Start & Completion Dates	From:	December 3, 2017	To:	April 6, 2018

Reason(s) for Difference Between Estimated and Actual Dates: Hardware installation delayed the project time line
If the Prospective Contractor performed the work as a subcontractor, the Prospective Contractor should describe the scope of subcontracted activities:

Reference 2

PROSPECTIVE CONTRACTOR INFORMATION	
Name: Shurtape Technologies LLC.	Contact/Name: Sourabh Mittal
Project Dates: July 10, 2017 – December 10, 2017	Contact Phone: +1 (704)491 - 9957
CUSTOMER INFORMATION	
Customer Organization: Shurtape Technologies, LLC, is a leading manufacturer and marketer of adhesive tape and consumer home and office products, with facilities in the United States, Canada, United Kingdom, Germany, Mexico, Peru, United Arab Emirates and China.	Customer Contact Name: Mark Lail Customer Phone: +1 (828) 267-8357
Customer Address: 1712 8th Street Drive DE, Hickory, NC 28602	Customer Email: marklail@shurtape.com Customer Fax:
PROJECT INFORMATION	
Total Prospective Contractor Staff:	10 Resource
Project Objectives: SAP BW upgrade and migration Oracle database to HANA 2.0 database	
Project Description: SAP BW 7.4 SP09 upgrade to SAP BW 7.5 SP05 and migrate Oracle 11g to HANA 2.0 database	
Prospective Contractor's Involvement (Role and Scope): **Role** **SAP Migration Specialist** **Scope** • Install Operating System (SUSE Linux) according to SAP BW on HANA requirements • Install HANA Database on HANA TDI (Tailored Datacenter Integration) according to SAP BW on HANA requirements, including passing the KPI tool • Pre-BW Upgrade/HANA Database Migration activities • BW Upgrade and HANA Database migration using SUM DMO (From SAP BW 7.4 SP09 to SAP BW 7.5 SP5) • Migrate BW app servers to WS 2012 R2 if WS 2008 R2 turns out not to be supported • Post-BW Upgrade/HANA Database Migration activities • BW functional/technical support during testing and validation by business • Disaster recovery - Storage replication set up • Knowledge transfer and documentation • SAP Pre- and Post-Go live check - BW on HANA Migration	
PROSPECTIVE CONTRACTOR KEY PERSONNEL ASSIGNED TO PROJECT	
Name: Steven Robacher	Role: Project Manager Onsite
Name: Sathish Kumar Arram	Role: SAP Migration Specialist Onsite

Name: Farhan K Bhaba	Role: BW Lead Consultant Onsite
Name: Vikram Kankam	Role: BO BASIS Architect Onsite
Name: Hareesh Chowdary Muthineni	Role: Project Manager Offshore
Name: Sitaramanjaneyulu	Role: BW Lead Consultant Offshore
Name: Dilip Kumar Raju Gadiraju	Role: BASIS Consultant Offshore
Name: Vijay Kumar Jakkam	Role: BOBJ Consultant Offshore
Name: Raghavendra Bellam	Role: BW Consultant Offshore
Name: Vijay Kumar	Role: BW / ABAP Consultant Offshore

PROJECT MEASUREMENTS				
Estimated Start & Completion Dates	From:	July 10, 2017	To:	December 10, 2017
Actual Start & Completion Dates	From:	July 10, 2017	To:	December 10, 2017
Reason(s) for Difference Between Estimated and Actual Dates:				
If the Prospective Contractor performed the work as a subcontractor, the Prospective Contractor should describe the scope of subcontracted activities:				

Reference 3

PROSPECTIVE CONTRACTOR INFORMATION				
Name: TE Connectivity Ltd.		Contact/Name: David Werner		
Project Dates: September 29, 2014 – December 31, 2014		Contact Phone: +1 (610) 613-0901		
CUSTOMER INFORMATION				
Customer Organization: TE Connectivity is a technology company that designs and manufactures connectivity and sensor products for harsh environments in a variety of industries, such as automotive, industrial equipment, data communication systems, aerospace, defense, medical, oil and gas, consumer electronics, energy and subsea communications		Customer Contact Name: Kyle Paukert Customer Phone: 717-986-3362		
Customer Address 200 AMP Drive Harrisburg, PA 17112		Customer Email: kyle.paukert@te.com Customer Fax:		
PROJECT INFORMATION				
Total Prospective Contractor Staff:	1			
Project Objectives: Upgrade of SAP BW 7.3 on HANA to SAP BW 7.4 on HANA				
Project Description: The scope of the services included in the Statement of Work provided for a YASH SAP BW HANA administrator for SAP BW technical upgrade related activities. The below BW instances were in scope: • HD1 • HL1 • HZ1 • HP1				
Prospective Contractor's Involvement (Role and Scope): YASH provided a SAP BW HANA Administrator resource to perform SAP BW technical upgrade.				
PROSPECTIVE CONTRACTOR KEY PERSONNEL ASSIGNED TO PROJECT				
Name: Tejeswara Rao Sistu		Role: SAP BW HANA Administrator		
PROJECT MEASUREMENTS				
Estimated Start & Completion Dates	From:	September 29, 2014	To:	December 31, 2014
Actual Start & Completion Dates	From:	September 29, 2014	To:	December 31, 2014

Reason(s) for Difference Between Estimated and Actual Dates:
If the Prospective Contractor performed the work as a subcontractor, the Prospective Contractor should describe the scope of subcontracted activities:

Reference 4

PROSPECTIVE CONTRACTOR INFORMATION	
Name: Triveni Turbines Pvt. Ltd.	Contact/Name: Amit Kapoor
Project Dates: September 8, 2016 to December 12, 2016	Contact Phone: +91 - 9908866443
CUSTOMER INFORMATION	
Customer Organization: Triveni Turbine Ltd. is a leading industrial steam turbine manufacturer, with a dominant market share of over 60% in India. Over 3,000 steam turbines supplied by Triveni have been installed across 18 industries in over 70 countries, including Europe, Africa, Central & Latin America, SE Asian and SAARC countries.	Customer Contact Name: Guruprasad Hubli Customer Phone: +91-9108015996
Customer Address: 12-A, Peenya Industrial Area, Bangalore, Karnataka - 560 058, India	Customer Email: guruprasad.hubli@triveniturbines.com Customer Fax:
PROJECT INFORMATION	
Total Prospective Contractor Staff:	4
Project Objectives: Migration of SAP ECC 6.0 Unicode conversion Development, Quality and Production systems, Oracle 10.2.0.2 to SAP ECC 6.0 EHP7 HANA DB with SAP Kernel 742 64 bit using DMO tool Migration of SAP Solution Manger 7.0 Oracle 10.2.0.2 to SAP Solution Manager 7.0, Sybase ASE 16.1 SAP Fiori Implementation	
Project Description: • Total Project Duration – 3 Months • Migrate SAP ERP ECC 6.0 systems landscape to HANA with SAP KERNEL 742 64-BIT using DMO tool • YASH will activate & Implement 25 standard Fiori Apps for Triveni Turbines. • YASH will implement HANA Live for Triveni Turbines. • YASH will provide 5 smart business executive dashboards. • Roles and authorization matrix during the different stages of project • Go-live and knowledge transfer. • Assessment and management of 20 programs/custom objects for performance improvement on ABAP on HANA.	

Prospective Contractor's Involvement (Role and Scope):

Below are the activities performed by YASH during SAP Solution Manager 7.0 SPS 14 migration

- OS migration: Windows+ Oracle 10.2.0.2 to Windows + Sybase ASE 16.0 64- bit with SAP Kernel 720_EXT 64-Bit using migration tools
- Source Database ORACLE 10.2.0.2
- Target Database Sybase ASE 16.0
- Post Migration activities

Below is the scope and activities performed by YASH during SAP ECC HANA migration

- SAP Upgrade and migration: Current SAP ERP 6.0 + Oracle 10.2.0.2 to SAP ECC 6.0 EHP7 + HANA DB or higher with SAP Kernel 742 64-bit using DMO tool
- Post Migration activities
- Functional Testing of SD, MM, FI/CO, PP modules by Triveni functional core team
- Go-live and hyper-care support for 2 weeks

PROSPECTIVE CONTRACTOR KEY PERSONNEL ASSIGNED TO PROJECT	
Name: Srinivas Popuri	Role: Project Manager
Name: Vishal Suresh Palaskar	Role: Migration Specialist
Name: Kailas Rameshwar Padwale	Role: BASIS Lead Consultant
Name: Harish Rajasekaran	Role: ABAP Lead / Fiori Consultant

PROJECT MEASUREMENTS				
Estimated Start & Completion Dates	From:	September 8, 2016	To:	December 12, 2016
Actual Start & Completion Dates	From:	September 8, 2016	To:	December 12, 2016

Reason(s) for Difference Between Estimated and Actual Dates:

If the Prospective Contractor performed the work as a subcontractor, the Prospective Contractor should describe the scope of subcontracted activities:

Table 3. Reference 5

PROSPECTIVE CONTRACTOR INFORMATION	
Name: Areej Vegetable Oils & Derivatives SAOC	Contact/Name: Amit Kapoor
Project Dates: April 5, 2016 to December 17, 2016	Contact Phone: +91 - 9908866443
CUSTOMER INFORMATION	
Customer Organization: Areej Vegetable Oils and Derivatives SAOG manufactures and distributes vegetable oils and its derivatives to institutional buyers primarily in the Middle East. Its products include sunflower, corn, and palm oils; frying and cooking oils; vegetable ghee; butters/margarines; bakery/ biscuit fats; and mayonnaises. The company also exports its products to 30 counties from Canada to New Zealand and the United States to Uzbekistan. It markets its products under the Minara, Sohar, Jabal Akhdar, and Muscat Margarine brand names. Areej Vegetable Oils and Derivatives SAOG is based in Rusayl, the Sultanate of Oman.	Customer Contact Name: Mr Arul S Selvan Customer Phone: +968-24448039
Customer Address: P. O. Box: 22 – Rusayl Postal Code: 124 Sultanate of Oman, UAE	Customer Email: aruls@avod.com.om Customer Fax:
PROJECT INFORMATION	
Total Prospective Contractor Staff:	4
Project Objectives: Upgrade of SAP ERP ECC 6.0, MS SQL 2005 DB (development, quality and productions) systems to SAP ECC 6.0 EHP7 HANA DB using DMO tool SAP Modules: FICO, MM, SD, PP, QM, ABAP, BASIS, WMS integration, Fiori with HANA Live, and HANA DR setup	
Project Description: • Migrate SAP ECC 6.0, MS SQL 2005 ERP Landscape to HANA with SAP KERNEL 742 64-BIT using DMO tool • Functional testing of FI/CO, SD, MM and PP by Areej functional core team • Go-Live & hyper-care support and Knowledge Transfer. • HANA DR setup using replication • Migration of Solution Manager 7.1, MS SQL 2005 to Solution Manager 7.1, ASE 16.0 using migration tool • Post migration activities	

Prospective Contractor's Involvement (Role and Scope):

- Migrate SAP ECC 6.0, MS SQL 2005 ERP Landscape to HANA with SAP KERNEL 742 64-BIT using DMO tool
- YASH will activate and Implement 40 standard Fiori Apps for AVOD.
- YASH will implement HANA Live for AVOD.
- YASH will provide 5 smart business executive dashboards.
- Roles and Authorization Matrix during the different stages of project
- Functional testing of FI/CO, SD, MM and PP
- Go-Live & hyper-care support and Knowledge Transfer.
- Assessment and Management of 30 programs/custom objects for performance improvement on ABAP on HANA.
- HANA DR setup using replication
- Interface with existing non-SAP Warehouse management system using DB connect between HANA DB and SQL DB
- Migration of Solution Manager 7.1, MS SQL 2005 to Solution Manager 7.1, ASE 16.0 using migration tool
- Post migration activities

PROSPECTIVE CONTRACTOR KEY PERSONNEL ASSIGNED TO PROJECT	
Name: Praveen Bhoomraogari	Role: Project Manager
Name: Vishal Suresh Palaskar	Role: Migration Specialist
Name: Leela Sai Shankar	Role: BASIS Consultant
Name: Naresh Kumar Pentari	Role: ABAP / Fiori Consultant

PROJECT MEASUREMENTS				
Estimated Start & Completion Dates	From:	April 5, 2016	To:	December 17, 2016
Actual Start & Completion Dates	From:	April 5, 2016	To:	December 17, 2016

Reason(s) for Difference Between Estimated and Actual Dates:

If the Prospective Contractor performed the work as a subcontractor, the Prospective Contractor should describe the scope of subcontracted activities:

2.1 Subcontractor References (If applicable)

If the Proposal includes the use of subcontractor(s), include at least three (3) references (for each subcontractor proposed) from scopes of work equivalent to the scope of work proposed of the subcontractor in the Proposal. At least two (2) of the references **must** be from HANA 2.0 upgrade projects. Each reference chosen should clearly demonstrate the subcontractor's ability to perform the relevant portion of work requested in the RFP (the State has established mandatory qualifications that must be met to submit a proposal as stated in Section 2.3 of the RFP), and proposed by the Prospective Contractor.

Instructions: Provide the information requested in the Tables below. Replicate the Table if more than three (3) references are desired. Do not change any of the completed cells. Any changes to the completed cells could lead to the disqualification of the Proposal.

Table 4. Subcontractor Reference 1

SUBCONTRACTOR INFORMATION	
Subcontractor Name: Genesis Consulting	Subcontractor Contact/Name: Nick Coticchia
Project Dates: 09/04/2017 to Present	Subcontractor Contact Phone: 703-677-3116
CUSTOMER INFORMATION	
Customer Organization: Minneapolis Public Schools # of Students: 37,000 # of Staff: 5,300 Annual Budget: $607,676,697	Customer Contact Name: Justin Hennes Director, IT Services Customer Phone: 612.668.0245
Customer Address: 1250 W Broadway Ave Minneapolis, MN 55411	Customer Email: Justin.Hennes@mpls.k12.mn.us Customer Fax:
PROJECT INFORMATION	

Project Objectives:

Selecting the right SAP platform was a key decision for MPS. The SAP platform is the basis for an optimal IT enablement of MPS' business. The existing SAP solution versions were not able to support the Finance, Procurement and HR functions resulting in a significant impact on the application landscape.

After a careful analysis of the current release and infrastructure of the SAP systems at MPS and the upgrade goals and infrastructure requirements of the target releases of the various SAP systems, Genesis recommended MPS adopt an upgrade strategy that met the goals of their HANA, New G/L SRM and SFSF projects, and also prepared the landscape for a future optional migration to the cloud while reducing risk and cost. The main business drivers for the upgrade included the following:

- Business user demand for new functionality in contract management, procurement and human resources to improve operational excellence, enable innovation, and reduce manual data entry
- Desire to increase process efficiency and thus reduce the total cost of ownership (TCO), particularly in terms of the total cost of operations – for example, by returning SAP software modifications and custom developments to SAP standard functions; and retiring redundant legacy systems (e.g. Novartis)
- Requirements from IT, such as planned infrastructure updates and consolidation projects that can be combined to take advantage with an upgrade (e.g. take advantage of the opportunity of the new hardware environment by performing the upgrade on the latest Windows and SQL Server platforms)
- SAP release and future migration strategy: Prepares MPS with the prerequisites (Unicode, target software releases & database/hardware) to migrate to HANA (either on premise or the cloud) while providing the opportunity to evaluate the benefits and test scenarios

Project Description:

Genesis brought specific expertise and project experience for laying out a road map and implementation plan for technical platform solutions and future functional application innovations in MPS' SAP environments. Under this project engagement, MPS engaged Genesis Consulting in multiple phases for the implementation of SAP Technical Upgrades and new components as a prerequisite for future business initiatives at MPS.

Phase 1 Technical Upgrade

1. Upgrade to SAP ECC6.0 EHP7, SRM 7.0 EhP3, BI 7.4, BOBJ 4.2, and Portal 7.4
2. Upgrade in a separate hardware landscape (N+1) in the current data center at MPS
3. Take advantage of the opportunity of the new hardware environment by performing the upgrade on the latest Windows and SQL Server platforms
4. New Installation NetWeaver PI 7.4
5. New Installation MDM 7.1
6. New Installation Solution Manager 7.1/7.2

Expected Outcomes:

7. Perform technical upgrade of target ECC, BI, Portal and SRM release and implement PI/MDM to leverage latest functionality and prepare for future HANA conversion
8. Increase integration, linking of business processes, decrease costs, improve compliance and lower operational costs
9. Link MPS strategy with IT execution - accelerate organizational integration between different areas through an end-to-end process approach
10. New enhancement packs will have additional standard functionalities that can be leveraged for contract management, bidding and supplier registration
11. System performance is highly improved in the new enhancement packs. This will aid in conversion of contracts as well as maintaining any large contracts/files for attachment within the system

Subcontractor's Involvement (Role and Scope):

Role:

Genesis Consulting was the Lead Systems Integrator responsible for full delivery of the upgrade

Scope: The main scope of the Upgrade project included:

- Plan for New hardware landscape (MPS)
- Install Solution Manager 7.2 Sandbox with latest Support Pack Stack in current Landscape on SQL Server 2014/Windows 2012
- Perform system copy of Sandbox system in current hardware landscape on Sql Server 2014/Windows 2012
- Perform ECC Dual Stack Split for copied Sandbox system in current hardware landscape on Sql Server 2014/Windows 2012
- Install new hardware landscape and allocate systems for ECC Sandbox on SQL Server 2014/Windows 2012
- Migrate Solution Manager 7.2 Sandbox system to new hardware landscape on SQL Server 2014/Windows 2012
- Migrate splitted Sandbox ECC system to new hardware landscape on SQL Server 2014/Windows 2012
- Install NW PI Sandbox and other recommended products in new hardware landscape
- Perform system copy/migration of Sandbox systems for SRM, Portal, BW and BOBJ to new hardware landscape
- Define splitted ECC Sandbox system and other sandbox systems in Solution Manager 7.2 in new hardware environment
- Generate xml for target releases
- Perform combined Unicode conversion and Upgrade to target releases for sandbox systems in new hardware environment
- Perform Validation and GAP Analysis of target releases
- Perform Unit, Integration, Performance and UAT Testing
- Perform upgrade to all environments and landscapes (Sandbox, DEV, QAS, PRD)
- Knowledge transfer and training
- Cutover and Go-Live
- Post Production Support

SUBCONTRACTOR KEY PERSONNEL ASSIGNED TO PROJECT	
Name: Nick Coticchia	Role: Program Manager
Name: Matthew Bullion	Role: Project Manager
Name: Vijay Anand	Role: SAP Basis and NetWeaver Architect
Name: Prashant Nanga	Role: SAP ABAP Development Lead
Name Chad Calhoun	Role SAP BW Architect
Name: Srikanth Palagummi	Role: SAP BOBJ Architect
Name: Surendra Gona	Role: SAP Procurement Functional Architect

Name Subhani Peta		Role: SAP Finance Functional Architect		
Name: Jetendra Jilka		Role: SAP HCM Functional Architect		
PROJECT MEASUREMENTS				
Estimated Start & Completion Dates:	From:	08/28/2017	To:	01/26/2018
Actual Start & Completion Dates:	From:	09/04/2017	To:	01/12/2018
Reason(s) for Difference Between Estimated and Actual Dates: The delayed start of one week was primarily due to a delay in the contracting process. The early finish was due to the team's ability to complete all necessary project-related tasks early, thereby enabling the team to accelerate the production cutover and go-live tasks.				

Table 5. Subcontractor Reference 2

SUBCONTRACTOR INFORMATION	
Subcontractor Name: Genesis Consulting Partners	Subcontractor Contact/Name: Jason Fair
Project Dates: July 2014 - Present	Subcontractor Contact Phone: 804-523-8007
CUSTOMER INFORMATION	
Customer Organization: State of Florida Department of Management Services (DMS)	Customer Contact Name: David DiSalvo, Director People First
	Customer Phone: 850.413.9579
Customer Address: 4050 Esplanade Way Tallahassee, Florida 32399	Customer Email: David.DiSalvo@dms.myflorida.com
	Customer Fax:
PROJECT INFORMATION	

Project Objectives:

Genesis Consulting has partnered with KPMG to support the Independent Verification and Validation (IV&V) contract for the Department of Management Services, People First program. Genesis is the sole provider of SAP Services to support this scope of work. Due to outstanding services, our contract has been extended as well as re-awarded several times since 2014.

The People First system is a self-service, secure, Web-based HRIS comprised of traditional human resources modules. This system is primarily based on a SAP ERP (Enterprise Resource Planning) platform with other applications integrated and interfaced with this ERP platform. The human resources HR BPO contract with NGA provides for two People First Service Centers to meet customer needs and support these applications. Some key operational statistics of the People First system include:

- The State of Florida People First user base consists of over of 210,000 users including the employees of all 34 state agencies, employees of all 12 state universities, all state retirees who have elected to continue with health or retiree life insurance benefits.
- There are two service centers that handle approximately 30,000 calls per month on average.
- The People First system supports four payroll cycles and 13 collective bargaining units with a number of work schedule variations.
- Recruiting is supported by the People First system and since May 2003 more than 148,000 State of Florida positions have been posted in People First with more than 10.7 million employment applications submitted for those positions.

The Florida People First System is a self-service, secure, Web-based HRIS comprised of modular SAP and third-party technologies that support a scope of services ranging from:

- Appointments and status
- Attendance and leave
- Benefits administration
- Classification and organizational management
- Payroll preparation
- Performance Management
- Recruitment
- Reporting, with an external data warehouse component

Key Objectives of Genesis' scope of work has included the following:

- Provide ongoing SAP functional and technical expertise to the State of Florida
- Act as a trusted advisor to support the mission and objectives of the People First program
- Lead solution discussions for strategic SAP implementation and upgrade planning
- Provide IV&V services to review and support the work of the outsourced vendors supporting People First.

Project Description:

- ***SAP Strategy and HANA Roadmap*** – Lead the development of an SAP Strategic Roadmap including functional and technical upgrades, implementation of new functionality, Roadmap to HANA, BW/BOBJ implementation, Portal Upgrades. Facilitate discussions between the State and SAP on updated software requirements to support the roadmap, as well as updated license agreements.
- ***People First Services Provider Selection (ITN Preparation, Solicitation, and Selection Support)*** – Support the development of solicitation documents, review proposal responses for SAP technical and functional accuracy, proposer approach validity and reasonableness, and proposer's overall ability to meet the requirements of the State.
- ***SAP Technical Upgrade*** – Provide SAP NetWeaver specialists to review the design, architecture, approach, testing results, and make recommendations for improvement. Work with integrator to optimize the network, hardware, security, and overall SAP environment. Conduct site visits to review SAP hardware, Basis and NetWeaver configurations, review and recommend SAP OSS and EhP considerations, review security environment, review integration and performance testing.
- ***SAP SuccessFactors Implementation*** – Provide functional and technical support on the design, configuration, testing, and implementation of SAP SuccessFactors Talent Management solutions.
- ***SAP UI5 Portal Upgrade*** – Provide strategic and program management, as well as technical and functional support for the UI5 Upgrade to the People First portal. Conduct technical reviews of infrastructure, security, penetration and vulnerability and performance of networks and infrastructure. Review all testing phases, defects to support "Go/No-Go" decisions.
- ***SAP BW/BOBJ Implementation*** – Provide program management, functional and technical support of the design, configuration, testing and implementation of SAP Business Warehouse and Business Objects.

Subcontractor's Involvement (Role and Scope):

Genesis Consulting in each of these projects has provided SAP subject matter experts including SAP Project Management, Functional, and Technical roles. Several of the key Genesis Consultants that have worked at the State of Florida include:

SAP Strategy and Program Lead: Led the development of a 5-year strategic roadmap for SAP initiatives including technical upgrades, new functional capabilities, and overall modernization efforts. Led the development of a HANA roadmap strategy. Developed the strategic roadmap for implementation of Business Warehouse and Business Objects. Facilitated license negotiations between SAP and the State of Florida resulting in significant savings.

SAP HANA Architect: Provide overviews of SAP HANA and discuss options for migration to HANA. Identify migration options with associated risks and pros and cons of options, as well as roadmap considerations. Lead discussions on Migration approach, HANA capabilities, HANA options, Portal Requirements, Fiori/Mobility options, BW/BOBJ options and considerations, ABAP/UI5 development considerations.

SAP Basis and NetWeaver Consultant: Provide ongoing technical support related to Support Pack and Enhancement Pack analysis, impact, application, and testing. Provide ongoing guidance on SAP NetWeaver, infrastructure, and Basis requirements and configuration to optimize overall performance. Provide options, approach, associated risks, with technical infrastructure considerations.

SAP NetWeaver and Portal Architects: Provide SAP NetWeaver experience to support technical Enhancement Pack and upgrades. Review technical approach, testing approach and results. Review configuration settings to ensure optimized performance. Review Portal design and overall compliance with functional requirements.

SAP HCM and SuccessFactors Talent Management Consultant: Support the functional approach, configuration, and user acceptance testing efforts during the implementation of SAP SuccessFactors Talent Management.

SAP Network and Infrastructure Consultant: Conduct technical reviews to optimize performance of SAP People First solutions. Review configuration and settings of network, infrastructure, and hardware as well as SAP. Establish performance standards and acceptance criteria based on environment and requirement to support up to 200,000 users with 10,000 concurrent users. Conduct site visit reviews to discuss penetration and vulnerability risks.

SUBCONTRACTOR KEY PERSONNEL ASSIGNED TO PROJECT	
Jason Fair	Program Manager and SAP Solution Architect
Nick Coticchia	Program Manager
Chad Plaster	SAP HANA Architect
Bala Rajendran	SAP NetWeaver Solution Architect
Asmita Jain	SAP HCM and SuccessFactors Lead
Vijay Budati	SAP NetWeaver/Portals Lead

PROJECT MEASUREMENTS				
Estimated Start & Completion Dates:	From:	July 2014	To:	Present
Actual Start & Completion Dates:	From:	July 2014	To:	Present

Reason(s) for Difference Between Estimated and Actual Dates:
None.

Table 6. Subcontractor Reference 3

SUBCONTRACTOR INFORMATION	
Subcontractor Name: Genesis Consulting	Subcontractor Contact/Name: Nick Coticchia
Project Dates: November 2015 - Present	Subcontractor Contact Phone: 703-677-3116
CUSTOMER INFORMATION	
Customer Organization: State of Arkansas Department of Finance and Administration	Customer Contact Name: Ken Williams
	Customer Phone: (501) 324-9058
Customer Address: 1515 West Seventh Street – Suite 6000 Little Rock AR, 72201	Customer Email: Ken.Williams@DFA.Arkansas.Gov
	Customer Fax: N/A
PROJECT INFORMATION	
Project Objectives: The key objective of the project was to Modernize the State's SAP installation (AASIS) by deploying and enhancing SAP ECC modules and improve the overall User Experience (UX) through the deployment of SAP tools including Fiori Applications, Personas, and WebDynpro. These SAP tools, new to the State, required several enhancements and upgrades to the State's SAP landscape including new SAP Gateway Components, new Fiori Application Components, new Web Dispatcher components, and SAP Support Pack and Kernel upgrades.	
Project Description: State of Arkansas EASE Time and Leave Project – Modernized the State of Arkansas's SAP system to support ESS/MSS Time and Leave. SAP Fiori Applications were implemented to support an improved User Experience (UX). During this project, the SAP system infrastructure was upgraded to support the Fiori framework including Mobile Device capabilities.	
Subcontractor's Involvement (Role and Scope): Genesis Consulting was a partner with Plan-B-IT Consulting working with the Arkansas Department of Finance and Administration (DFA) to implement SAP Employee and Manager Self Service (ESS) for Time and Leave entry / approval. The initial roll-out to over 3,000 employees, and eventually 30,000 employees, will enable their ability to enter time and leave through desk top PCs and mobile devices including tablets and smartphones. Genesis was a key contributor for the following scope: • System Configuration for ESS Time and Leave • Workflow Configuration for Automated Approval Processing • Organization Structure Master Data Clean-up • Technical Infrastructure, SAP NetWeaver Gateway services and Portal Setup • Mobile Device Integration for Time / Leave Entry and Supervisor Approval • SAP Fiori Applications for Desktop and Mobile Devices • Worldwide Web Access and SAP Single Sign-On	
SUBCONTRACTOR KEY PERSONNEL ASSIGNED TO PROJECT	
Name: Vijay Budatti	Role: NetWeaver Portal, UI, Fiori Architect
Name: Jitendra Jilka	Role: SAP HCM Functional Architect
PROJECT MEASUREMENTS	

Estimated Start & Completion Dates:	From:	November 2015	To:	April 2018
Actual Start & Completion Dates:	From:	November 2015	To:	April 2018

Reason(s) for Difference Between Estimated and Actual Dates: Not applicable. All project milestones were achieved according to original plans.

Table 7. Subcontractor Reference 1

SUBCONTRACTOR INFORMATION	
Subcontractor Name: Plan B IT Consulting, LLC	Subcontractor Contact/Name: Karl Foss
Project Dates: November 2015 – March 2018	Subcontractor Contact Phone: (219) 629-0394
CUSTOMER INFORMATION	
Customer Organization: State of Arkansas Department of Finance and Administration	Customer Contact Name: Ken Williams
	Customer Phone: (501) 324-9058
Customer Address: 1515 West Seventh Street – Suite 6000 Little Rock AR, 72201	Customer Email: Ken.Williams@DFA.Arkansas.Gov
	Customer Fax: N/A
PROJECT INFORMATION	
Project Objectives: The key objective of the project was to Modernize the State's SAP installation (AASIS) by deploying and enhancing SAP ECC modules and improve the overall User Experience (UX) through the deployment of SAP tools including Fiori Applications, Personas, and WebDynpro. These SAP tools, new to the State, required several enhancements and upgrades to the State's SAP landscape including new SAP Gateway Components, new Fiori Application Components, new Web Dispatcher components, and SAP Support Pack and Kernel upgrades.	
Project Description: State of Arkansas EASE Time and Leave Project – Modernized the State of Arkansas's SAP system to support ESS/MSS Time and Leave. SAP Fiori Applications were implemented to support an improved User Experience (UX). During this project, the SAP system infrastructure was upgraded to support the Fiori framework including Mobile Device capabilities.	

Subcontractor's Involvement (Role and Scope): Plan B functioned as the Lead System Integrator for the State's SAP Modernization projects and was responsible for all aspects of the projects including project timelines, scope, solutions, and work product quality. Plan B was responsible for the day-to-day coordination and delivery of the project against a baseline schedule, budget, and scope. SAP System Infrastructure tasks included the following:

- Installation and configuration of SAP NetWeaver ABAP and Java systems on Linux Systems;
- Installing and configuration of SAP Web dispatcher, setting up Redirection and permission Rules, Perform secure socket layer (SSL) configurations;
- Designing of SAP Architecture & Sizing of the Existing and New SAP Systems. Implementing SAP notes & Support pack upgrade;
- Perform Single Sign configurations of SAP NetWeaver systems and linked third part software's;
- Performance tuning on High load scenarios and performance optimization;
- Implementing SAP notes & Support pack Upgrade using Software Update Manager and perform Risk analysis;
- Database Installation, upgrades and configuration;
- Configuration of Transport Management System;
- Install and Configure SAP Fiori mobile Applications;
- Performance tuning and Sizing Analysis of Existing and New SAP systems;
- Developing Cut over plans and defining processes for smooth operation of SAP systems.

SUBCONTRACTOR KEY PERSONNEL ASSIGNED TO PROJECT	
Name: Chetan Anguralia	Role: Technical Basis Infrastructure Lead

PROJECT MEASUREMENTS				
Estimated Start & Completion Dates:	From:	November 2015	To:	April 2018
Actual Start & Completion Dates:	From:	November 2015	To:	April 2018

Reason(s) for Difference Between Estimated and Actual Dates: Not applicable. All project milestones were achieved according to original plans.

Table 8. Subcontractor Reference 2

SUBCONTRACTOR INFORMATION	
Subcontractor Name: Plan B IT Consulting, LLC	Subcontractor Contact/Name: Karl Foss
Project Dates: November 2015 – March 2018	Subcontractor Contact Phone: (219) 629-0394
CUSTOMER INFORMATION	
Customer Organization: State of Arkansas Department of Finance and Administration	Customer Contact Name: Ken Williams
	Customer Phone: (501) 324-9058
Customer Address: 1515 West Seventh Street – Suite 6000 Little Rock AR, 72201	Customer Email: Ken.Williams@DFA.Arkansas.Gov
	Customer Fax: N/A
PROJECT INFORMATION	
Project Objectives: The key objective of the project was to Modernize the State's SAP installation (AASIS) by deploying and enhancing SAP ECC modules and improve the overall User Experience (UX) through the deployment of SAP tools including Fiori Applications, Personas, and WebDynpro. These SAP tools, new to the State, required several enhancements and upgrades to the State's SAP landscape including new SAP Gateway Components, new Fiori Application Components, new Web Dispatcher components, and SAP Support Pack and Kernel upgrades.	
Project Description: The State of Arkansas SAP Modernization Projects included three (3) distinct initiatives: State of Arkansas EASE Procurement Project – Modernized the State of Arkansas's SAP system to support procurement approvals for Purchase Requisitions, Outline Agreements, and Purchase Orders. This Modernization project leveraged the enhanced system infrastructure deployed during the EASE Time and Leave project and included Fiori Applications for an improved UX. Mobile device procurement approval capabilities were also included as part of this strategic modernization project for the State.	

Subcontractor's Involvement (Role and Scope): Plan B functioned as the Lead System Integrator for the State's SAP Modernization projects and was responsible for all aspects of the projects including project timelines, scope, solutions, and work product quality. Plan B was responsible for the day-to-day coordination and delivery of the project against a baseline schedule, budget, and scope. SAP System Infrastructure tasks included the following:

- Installation and configuration of SAP NetWeaver ABAP and Java systems on Linux Systems;
- Installing and configuration of SAP Web dispatcher, setting up Redirection and permission Rules, Perform secure socket layer (SSL) configurations;
- Designing of SAP Architecture & Sizing of the Existing and New SAP Systems. Implementing SAP notes & Support pack upgrade;
- Perform Single Sign configurations of SAP NetWeaver systems and linked third part software's;
- Performance tuning on High load scenarios and performance optimization;
- Implementing SAP notes & Support pack Upgrade using Software Update Manager and perform Risk analysis;
- Database Installation, Upgrades and configuration;
- Configuration of Transport Management System;
- Install and Configure SAP Fiori mobile Applications;
- Performance tuning and Sizing Analysis of Existing and New SAP systems;
- Developing Cut over plans and defining processes for smooth operation of SAP systems.

SUBCONTRACTOR KEY PERSONNEL ASSIGNED TO PROJECT	
Name: Chetan Anguralia	Role: Technical Basis Infrastructure Lead

PROJECT MEASUREMENTS				
Estimated Start & Completion Dates:	From:	November 2015	To:	April 2018
Actual Start & Completion Dates:	From:	November 2015	To:	April 2018

Reason(s) for Difference Between Estimated and Actual Dates: Not applicable. All project milestones were achieved according to original plans.

Table 9. Subcontractor Reference 3

SUBCONTRACTOR INFORMATION	
Subcontractor Name: Plan B IT Consulting, LLC	Subcontractor Contact/Name: Karl Foss
Project Dates: November 2015 – March 2018	Subcontractor Contact Phone: (219) 629-0394
CUSTOMER INFORMATION	
Customer Organization: State of Arkansas Department of Finance and Administration	Customer Contact Name: Ken Williams
	Customer Phone: (501) 324-9058
Customer Address: 1515 West Seventh Street – Suite 6000 Little Rock AR, 72201	Customer Email: Ken.Williams@DFA.Arkansas.Gov
	Customer Fax: N/A
PROJECT INFORMATION	
Project Objectives: The key objective of the project was to Modernize the State's SAP installation (AASIS) by deploying and enhancing SAP ECC modules and improve the overall User Experience (UX) through the deployment of SAP tools including Fiori Applications, Personas, and WebDynpro. These SAP tools, new to the State, required several enhancements and upgrades to the State's SAP landscape including new SAP Gateway Components, new Fiori Application Components, new Web Dispatcher components, and SAP Support Pack and Kernel upgrades.	
Project Description: The State of Arkansas SAP Modernization Projects included three (3) distinct initiatives: State of Arkansas EASE Performance, Goals, and Compensation Management Project – Implemented the SAP ECC Performance and Compensation Management modules to support the State's requirements for a new system to support the results of the State's Pay Plan study. During this project, Plan B continued with the Modernization of the State's SAP system. Fiori Applications were development and implemented to provide the State with a full Performance Management solution using a Modernized Fiori Application front-end for an enhanced UX. Mobile device capabilities were also included as part of this strategic modernization project for the State.	

Subcontractor's Involvement (Role and Scope): Plan B functioned as the Lead System Integrator for the State's SAP Modernization projects and was responsible for all aspects of the projects including project timelines, scope, solutions, and work product quality. Plan B was responsible for the day-to-day coordination and delivery of the project against a baseline schedule, budget, and scope. SAP System Infrastructure tasks included the following:

- Installation and configuration of SAP NetWeaver ABAP and Java systems on Linux Systems;
- Installing and configuration of SAP Web dispatcher, setting up Redirection and permission Rules, Perform secure socket layer (SSL) configurations;
- Designing of SAP Architecture & Sizing of the Existing and New SAP Systems. Implementing SAP notes & Support pack upgrade;
- Perform Single Sign configurations of SAP NetWeaver systems and linked third part software's;
- Performance tuning on High load scenarios and performance optimization;
- Implementing SAP notes & Support pack Upgrade using Software Update Manager and perform Risk analysis;
- Database Installation ,Upgrades and configuration ;
- Configuration of Transport Management System;
- Install and Configure SAP Fiori mobile Applications;
- Performance tuning and Sizing Analysis of Existing and New SAP systems;
- Developing Cut over plans and defining processes for smooth operation of SAP systems.

SUBCONTRACTOR KEY PERSONNEL ASSIGNED TO PROJECT	
Name: Chetan Anguralia	Role: Technical Basis Infrastructure Lead

PROJECT MEASUREMENTS				
Estimated Start & Completion Dates:	From:	November 2015	To:	April 2018
Actual Start & Completion Dates:	From:	November 2015	To:	April 2018

Reason(s) for Difference Between Estimated and Actual Dates: Not applicable. All project milestones were achieved according to original plans.

2.2 SAP Certification

Please provide information regarding your organizations status as an SAP Partner Center of Expertise Certification (SAP PCOE certification). Please include links or other documentation that show this status.

YASH is an SAP Center of Expertise (SAP PCOE) partner as well as a SAP-Qualified Partner Solution on SAP Business All-in-One for SAP S/4HANA 1610. Please find in the following pages attached copies of the SAP PCOE Certificate and the SAP BAiO-S/4HANA Certificate.

Partner Center of Expertise

SAP® Certified
Partner Center of Expertise

This certificate confirms that

YASH Technologies, Inc.

Supports its customers in accordance with SAP's current standards for a Partner Center of Expertise.

This audit has been performed on **February 19, 2018**. The certification is valid until April 30, 2020.

Axel Timm
Program Director
SAP Digital Business Services

Natalia Halubtsova
Auditor
SAP Partner Delivery Services

Certificate of Qualification

SAP hereby confirms that the packaged solution from

YASH Technologies

has been reviewed and approved as an SAP-Qualified Partner Solution on SAP Business All-in-One for SAP S/4HANA 1610 (on-premise edition).

This SAP-qualified partner solution is built on the next generation of SAP Business All-In-One and offers the simplification and innovations introduced in SAP S/4HANA including our advanced in-memory platform, a personalized user experience with SAP Fiori, embedded real time analytics, and end-to-end business processes within our digital core, SAP Enterprise Management.

Deployed using preconfigured business processes; this SAP-qualified partner solution by YASH Technologies (Partner ID 883130) is built to drive instant value for customers in India. The solution addresses the business needs of the S/4HANA System Conversion.

Date Issued: June 20th, 2017

Qualification Expiration Date: June 19th, 2018

Bobby Vetter
Senior Vice President
ERP & PSG Portfolio Management
Global Channels and General Business

Steffen Burger
Vice President
SAP Partner Solution Center
Global Channels and General Business

*SAP Business All-in-One is comprised of cross industry or industry-specific solutions for fast-growing small and midsize companies, supporting integrated processes that cover the complete business life cycle. The solutions run on the SAP HANA in-memory database, are deployed both on premise and through a private cloud offering, and are available from SAP partners. There are currently more than 27,000 customers using SAP Business All-in-One solutions in more than 55 countries.

See more at: http://www.sap.com/product/enterprise-management/business-all-in-one.html

2.3 Prospective Contractor's Work Locations

The Contractor Key Project Personnel associated with this engagement must be available to participate in project-related meetings as scheduled by DFA during normal business hours, Monday through Friday 8:00 a.m. to 5:00 p.m. CST, except Federal, State and local holidays.

Per Section 2.10.C.3. of the RFP, Contractor prefers to have at least one (1) dedicated BASIS administrator onsite for the duration of the project dedicated to performing the activities required to complete the entire upgrade.

Per Section 2.10.C.4 of the RFP, the State prefers the Contractor have other key technical staff onsite and dedicated during critical stages of the upgrade.

At no time shall the Contractor maintain, use, transmit, or cause to be transmitted information governed by privacy laws and regulations outside of the United States and its territories.

Instructions: Describe the locations where the Prospective Contractor proposes performing work associated with this RFP. Indicate the site(s) from which the Prospective Contractor will perform the relevant tasks identified in this Proposal. If the site(s) for a specific task changes during the Contract term, provide a timeline reflecting where the task will be performed during each time period.

Specifically identify where the Key Project Personnel identified in the RFP will be physically located for the duration of the Contract.

For each of the deliverables identified in the RFP, provide the percentage of work to be done in the State.

Team YASH recognizes the importance of having Key Personnel onsite working hand in hand with the State for the SAP HANA Upgrade Installation services and we are prosing an Onsite / Onshore model that focuses on technical delivery and knowledge transfer. Key resources will be working from State of Arkansas onsite office and Onshore resources will be working from YASH Missouri / New Jersey offices mentioned below:

YASH Missouri Office: 3 City Place Drive, Suite# 520, St. Louis MO 63141

YASH New Jersey Office: Suite 2–2, 600 Alexander Rd, Princeton NJ 08540.

An overview of the proposed work to be conducted on and off-site for our Key Personnel is listed below. All Team Yash consultants are based in the continental USA.

Key Project Resource Name	Project Role	% Location	
		Onsite	Onshore
John Atkinson	Project Manager	90%	10%
Niranjan Cheluri	Certified Migration Specialist	75%	25%
Sathish Kumar Arram	Technical Infrastructure Consultant	80%	20%
S. Prasad Chilamkurthi	ABAP Lead	70%	30%

An overview of the percent of work to be conducted by Team YASH on and off-site for the proposed milestones is listed below. All Team Yash consultants are based in the continental USA.

Milestone Delivery	% work done in the State	% work done out the State
Project Preparation Sandbox Installation/Completion	72%	28%
Development/QA Completion	53%	47%
Completion of UAT and Go-live	66%	44%
Completion of Post Go-live Support	82%	18%

3.0 Legal Considerations

3.1 Existing Business Relationships with the State of Arkansas

Instructions: Describe any existing or recent (within the last five (5) years) business relationships the Prospective Contractor or any of its affiliates and proposed subcontractors has with the State.

YASH Technologies has no previous business relationships with the State of Arkansas. However, YASH Teaming Partners, Plan B IT Consulting and Genesis Consulting have been subcontractors through CAI's State Vendor contract supporting the State's SAP projects.

3.2 Business Disputes

Instructions: Provide details of any disciplinary actions and denote any that are pending litigation or Terminated for Cause or Convenience and associated reasons. Also denote any other administrative actions taken by any jurisdiction or person against the Prospective Contractor. List and summarize all judicial or administrative proceedings involving sourcing activities, claims of unlawful employment discrimination and anti-trust suits in which the Prospective Contractor has been a party within the last five (5) years. If the Prospective Contractor is a subsidiary, submit information for all parent companies. If the Prospective Contractor uses subcontractors, associated companies and consultants that will be involved in any phase of this engagement, provide the same information for each of these entities.

YASH and its Subcontractors do not have any pending / litigations / business disputes with customers, contractors, and associated companies.

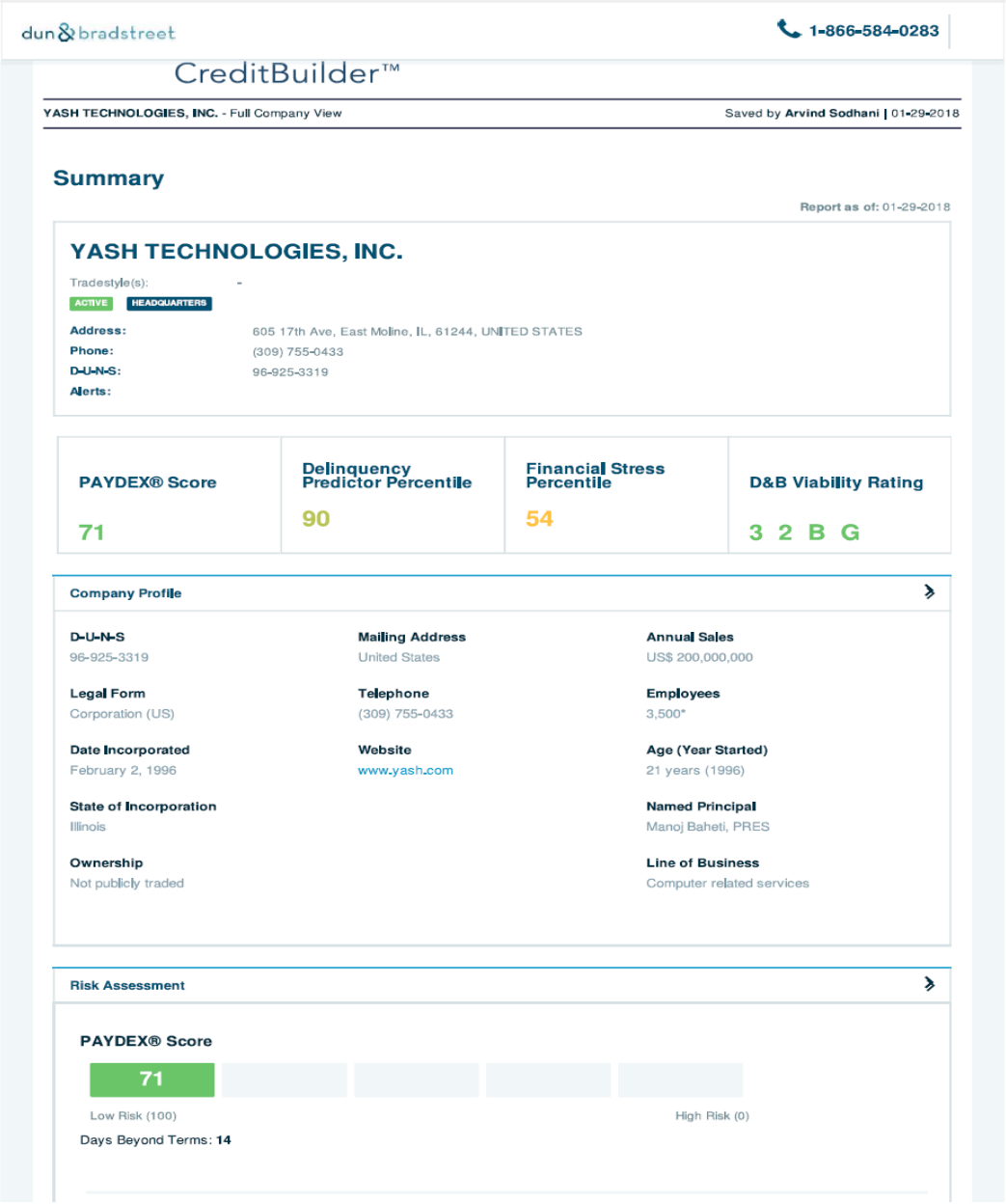
4.0 Financial Stability

4.1 Dun & Bradstreet Ratings

The Prospective Contractor should provide the industry standard Dun & Bradstreet (D&B) Ratings that indicates the firm's financial strength and creditworthiness, assigned to most US and Canadian firms (and some firms of other nationalities) by the US firm D&B. These ratings are based on a firm's worth and composite credit appraisal. Additional information is given in credit reports (published by D&B) that contain the firm's financial statements and credit payment history. Additional information may be requested regarding financial stability for the Prospective Contractor and any subcontractors proposed.

Instructions: Provide a D&B Ratings report.

Please find below the attached YASH Technologies Inc. D&B Rating report for the year 2018.



dun & bradstreet 1-866-584-0283

CreditBuilder™

YASH TECHNOLOGIES, INC. - Full Company View Saved by Arvind Sodhani | 01-29-2018

Summary

Report as of: 01-29-2018

YASH TECHNOLOGIES, INC.

Tradestyle(s): -

ACTIVE HEADQUARTERS

Address: 605 17th Ave, East Moline, IL, 61244, UNITED STATES
Phone: (309) 755-0433
D-U-N-S: 96-925-3319
Alerts:

PAYDEX® Score	Delinquency Predictor Percentile	Financial Stress Percentile	D&B Viability Rating
71	90	54	3 2 B G

Company Profile

D-U-N-S 96-925-3319	Mailing Address United States	Annual Sales US$ 200,000,000
Legal Form Corporation (US)	Telephone (309) 755-0433	Employees 3,500*
Date Incorporated February 2, 1996	Website www.yash.com	Age (Year Started) 21 years (1996)
State of Incorporation Illinois		Named Principal Manoj Baheti, PRES
Ownership Not publicly traded		Line of Business Computer related services

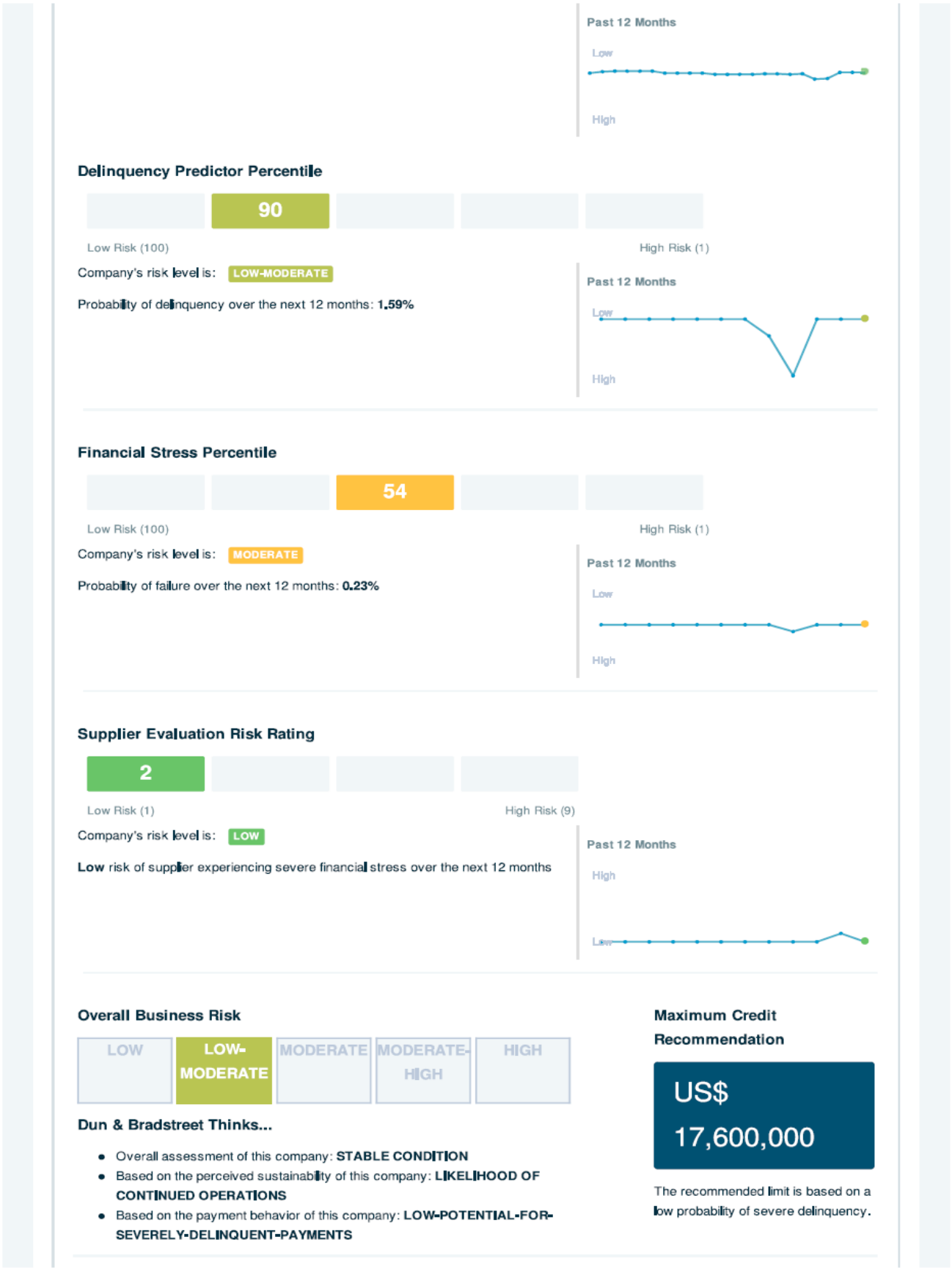
Risk Assessment

PAYDEX® Score

71

Low Risk (100) High Risk (0)

Days Beyond Terms: 14


Past 12 Months
Low
High
Delinquency Predictor Percentile
90
Low Risk (100)
High Risk (1)
Company's risk level is: LOW-MODERATE
Probability of delinquency over the next 12 months: 1.59%
Past 12 Months
Low
High
Financial Stress Percentile
54
Low Risk (100)
High Risk (1)
Company's risk level is: MODERATE
Probability of failure over the next 12 months: 0.23%
Past 12 Months
Low
High
Supplier Evaluation Risk Rating
2
Low Risk (1)
High Risk (9)
Company's risk level is: LOW
Low risk of supplier experiencing severe financial stress over the next 12 months
Past 12 Months
High
Low
Overall Business Risk
LOW
LOW-MODERATE
MODERATE
MODERATE-HIGH
HIGH
Dun & Bradstreet Thinks...
Overall assessment of this company: STABLE CONDITION
Based on the perceived sustainability of this company: LIKELIHOOD OF CONTINUED OPERATIONS
Based on the payment behavior of this company: LOW-POTENTIAL-FOR-SEVERELY-DELINQUENT-PAYMENTS
Maximum Credit Recommendation
US$ 17,600,000
The recommended limit is based on a low probability of severe delinquency.

Template T-4

Requirements Approach

Response Template

Yash Technologies, Inc.

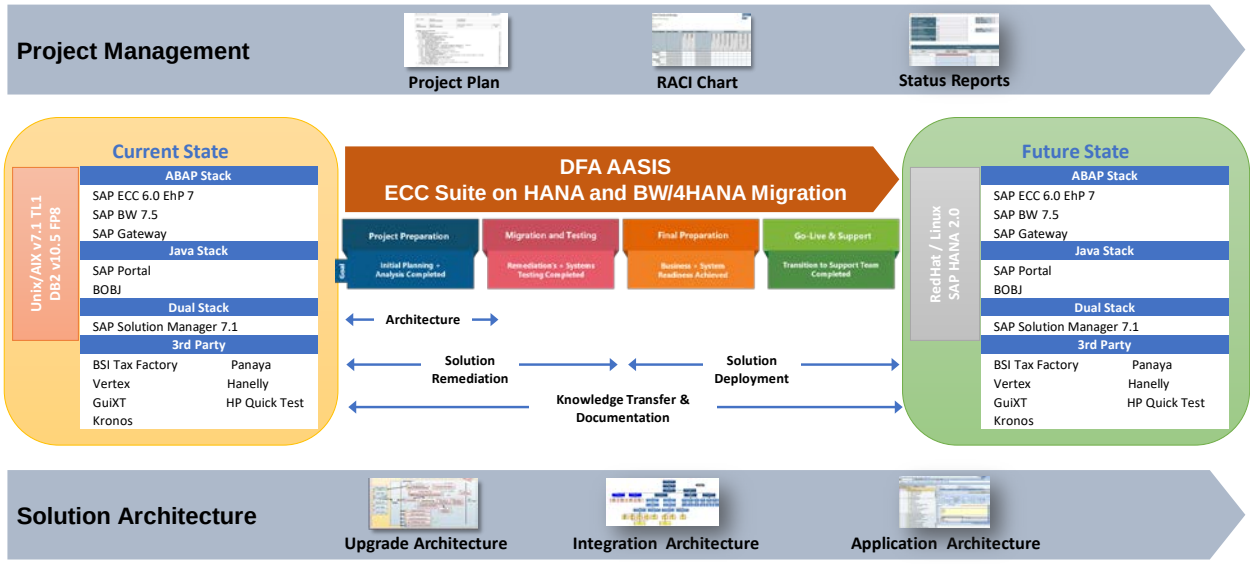
RFP #: SP-18-0087

Table of Contents

1.0 Approach to Upgrade

Describe your overall approach and strategy to providing the upgrade to the State of Arkansas.

Team YASH has over 22 years of experience implementing, upgrading, migrating, outsourcing and supporting large complex SAP programs including 23 recent HANA projects. We have gained extensive SAP HANA 2.0 Migration and application knowledge and bring our proven and repeatable approach to the DFA AASIS HANA Migration project. We acknowledge that the AASIS SAP ECC Suite on HANA and BW/4HANA migration is a complex process. This project affects business users, technical staff, Departments and Agencies and third parties integrated with AASIS. Team YASH will work with DFA team members to refine our migration strategy and technical approach that focuses on reducing risk. Our approach focuses on removing the technical risk and guesswork out of the migration through our proven approach, so DFA can focus on getting its people and organization ready to support the new HANA platform long after Go-Live. An overview of our approach for the DFA AASIS HANA Migration is depicted below:



DFA AASIS ECC Suite on HANA and BW/4HANA Approach

Our objective is to minimize risk and potential project delays that may be encountered. For the AASIS HANA migration, we anticipate full-scale SAP HANA 2.0 migration effort which requires migrating the SAP ECC and BW systems and components from the source hardware IBM and the IBM DB2 AIX OS/DB to the new target hardware and RedHat/Linux, full system and functional testing, acceptance and go-live. Based on our understanding of the RFP, our approach includes:

- Migration of SAP ECC systems to SAP's Business Suite on HANA platform, including Unicode migration in the ECC landscape. The current ECC landscape is 3.2 terabytes per system or smaller.
- Database migrations from IBM DB2 to HANA database. The current database consists of ECC and BW Systems DB2/UDB 10.5.0008.

- SAP BW systems to SAP's Business Warehouse for HANA platform which must include database migrations from IBM DB2 to HANA database. The current BW landscape is 3.1 terabytes per system or smaller.
- Migration of the SAP ECC systems and BW systems from Unix based IBM-AIX to Redhat/Linux which provides the operating infrastructure for the AASIS ecosystem.

Our approach begins with a migration planning workshop, where we will bring our lessons learned, including functional and technical plans as input to finalize the migration plans. This will help mitigate the typical migration challenges SAP customers encounter based on our experience. We plan to review our initial project plans included in T-5 using a migration method that meets the downtime requirements of the State. We also incorporate key aspects of solution architecture, remediation and knowledge transfer throughout our approach, working hand in hand with our State team counterparts. Advantages of our approach include:

- Step-by-step documentation with a project WBS structure and proven project methodology used on numerous successful HANA projects with our customers
- Guided process to migrate Suite on HANA database and BW/4HANA in an IT project format leveraging Team YASH documentation and processes
- The best approach and sequence to plan and migrate the AASIS system
- Experienced, certified and qualified SAP team who implemented SAP HANA Projects similar to DFA's scope

Suite on HANA Approach Considerations

After careful analysis of the DFA requirements listed in the RFP, our technical team considered 3 major options for the AASIS Suite on HANA approach, leveraging the SAP recommendation as the starting point for Team YASH's assessment – that is, we take the recommendation and relevant aspects supported by SAP into the discussion and use them as the basis for an individual assessment based on the requirements and objectives of the HANA implementation.

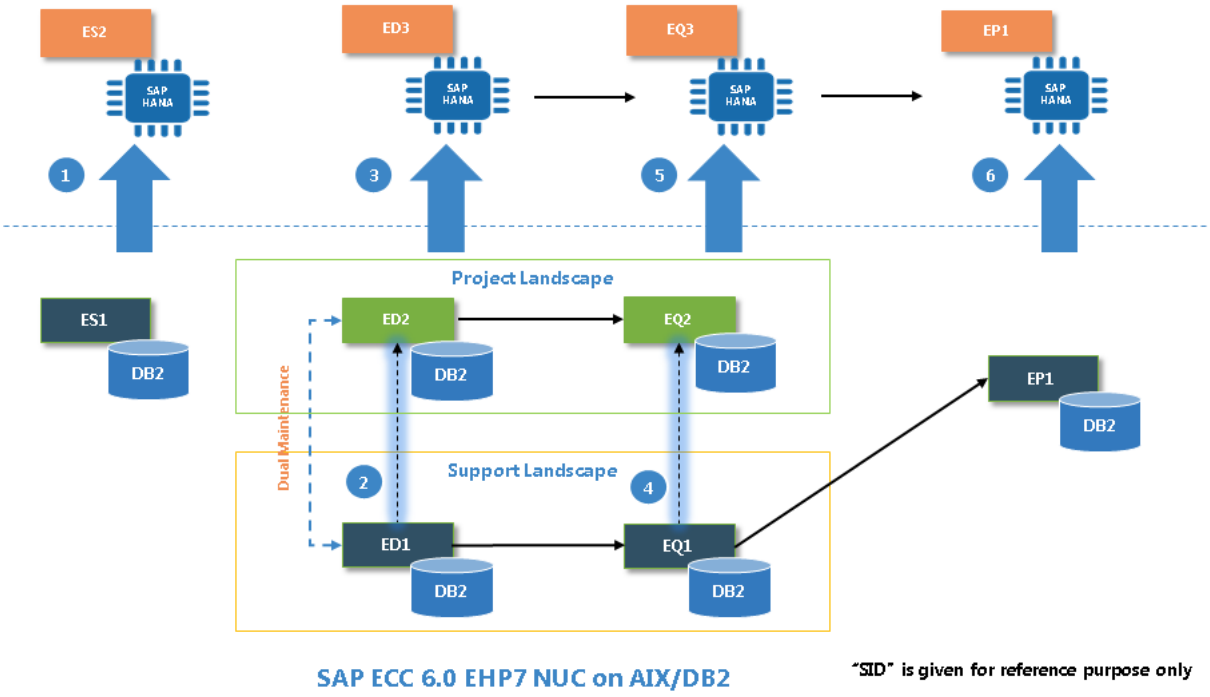
- The **general recommendation** is to use the database migration option of SUM, as it has become SAP's standard procedure for migrations to SAP HANA. With this approach DFA can benefit from a simplified migration to SAP HANA, performed by one tool, with minimized overall project cost and one downtime window.
- As **reasonable alternative** to our standard recommendation, in case the database migration option of SUM does not fit DFA's requirements, we consider using the classical migration procedure with software provisioning manager (SWPM), which is also continuously improved especially for the migration to SAP HANA. Reasons might be that the database migration option of SUM does not support the source release or there are concerns over a one-time conversion approach as offered by DMO of SUM.
- As **possible exception**, there are further migration procedures for special client cases, such as the consolidation of SAP systems during the migration project or the step-wise migration to SAP HANA.

YASH Recommended HANA Upgrade Approach

Among all the available options considered for ECC Unicode Conversion [UC] and HANA Upgrade (please refer to the next section for detailed *Solution Approaches*), Team YASH recommends the option of ECC UC and HANA Upgrade using DMO with system move [Solution Approach A.1 as outlined in the following section] based on our experience in previous migrations in line with SAP recommendations. An overview of our proposed approach is detailed below:

Suite on HANA Upgrade Approach

The step by step approach for the Suite on HANA Upgrade using DMO is depicted below:



DFA AASIS Suite on HANA Upgrade Process

- Step 1. Sandbox (ES1) UC Conversion and HANA Upgrade
- Step 2. Create new development ED2 by copying ED1 system
- Step 3. Development (ED3) – UC Conversion and HANA Upgrade
- Step 4. Create new quality (EQ2) by copying EQ1 system
- Step 5. Quality (EQ3) – UC Conversion and HANA Upgrade
- Step 6. Create Production (EP1) UC Conversion and HANA Upgrade

Key Drivers:

- Sandbox readiness (copy of production)
- HANA Tailored Data Integration (TDI) hardware availability
- In-flight projects
- Setup dual landscape
- DMO with system move
- Database size

BW/4HANA Approach Considerations

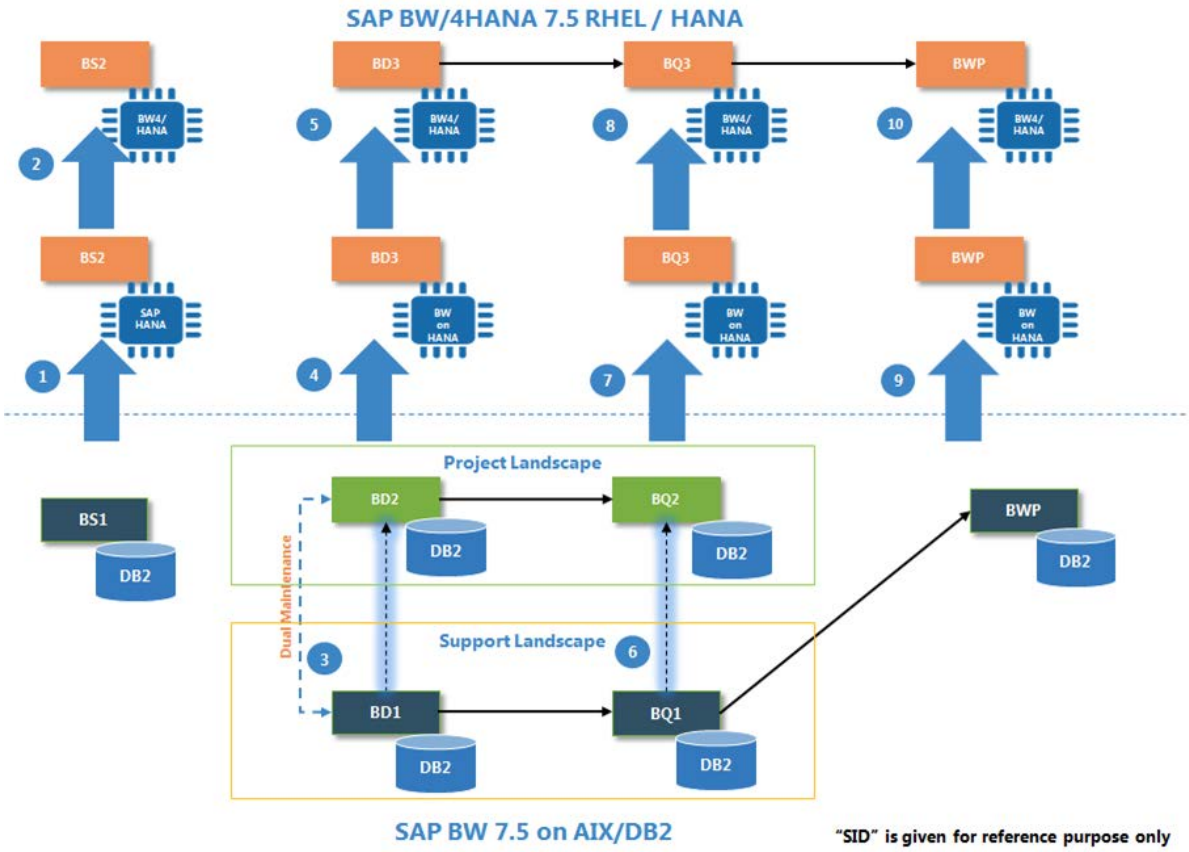
After careful analysis of the DFA requirements listed in the RFP, our technical team considered 2 major options for the AASIS BW/4HANA approach, leveraging SAP's supported options as a starting point for Team YASH's assessment.

- **In-place Conversion:** An in-place conversion involves transforming an existing system. The goal is to upgrade an installation – one that's already running the latest service pack for SAP BW 7.5 powered by SAP HANA (SP6). This is similar to the Suite on HANA approach recommend above using SUM.
- **Remote Conversion:** Remote conversions are based on new installations of SAP BW/4HANA. This approach is unique in that it eliminates the need to convert an entire legacy system. A remote conversion enables selected scenarios to convert while still in a development environment. These scenarios will then be transferred into your fresh installation and converted accordingly.

As far as SAP BW is concerned, from the available options for the DFA AASIS BW/4HANA migration, Team YASH recommends In-Place Conversion Approach. Details of the analysis are in the next section describing the options.

BW/4HANA Migration Approach

Our step by step approach for BW/4HANA Upgrade using DMO



DFA AASIS SAP BW/4HANA Upgrade Process

- Step 1. Sandbox BW on HANA Upgrade (BS1 → BS2)
- Step 2: Convert BS2 system from BW on HANA to BW/4HANA
- Step 3. Create new development BD2 system by copying BD1 system
- Step 4. Development BW on HANA Upgrade (BD2 → BD3)
- Step 5. Convert BD3 system from BW on HANA to BW/4HANA
- Step 6. Create new quality BQ2 system by copying BQ1 system
- Step 7. Quality BW on HANA Upgrade (BQ2 → BQ3)
- Step 8. Convert BQ3 system from BW on HANA to BW/4HANA
- Step 9. Production BW on HANA Upgrade
- Step 10. Convert Production system from BW on HANA to BW/4HANA

Key Drivers

- Current BW 7.5 version in place
- BW/4HANA conversion is treated the same way as HANA conversion
- Sandbox Readiness (copy of production)
- HANA TDI Hardware availability
- In-flight projects
- Set-up dual landscape
- Database Size

Please describe your organizations approach as it relates to DMO or an alternative. If providing an alternative approach, please include at a minimum, detailed description of the approach, pros/cons and expected outcomes utilizing the alternative approach.

1. ECC UC and HANA Migration

a. **Solution Approach A**: With Dual Landscape

i. **Option A.1**: ECC UC and HANA Migration using DMO with System Move

Pros	Cons
Reduced downtime	More manual effort with dual landscape in terms of developing & testing
Easy fallback option using DMO with system move, if something goes wrong during Go-Live	Need to maintain additional hardware until go-live
Robust change management strategy	Need to maintain the list of changes made in both old and new development systems
Before Go-live, no need to open production for emergency corrections	

ii. **Option A.2**: ECC UC and HANA Migration w/o DMO [Classic Approach]

Pros	Cons
Robust change management strategy	Increased downtime
Before Go-live, no need to open production for emergency corrections	Fallback to the original system would be time consuming
	More manual effort with Dual landscape in terms of developing and testing
	Need to maintain additional hardware till go-live
	Need to maintain the list of changes made in both OLD & NEW Development systems

b. **Solution Approach B**: Without Dual Landscape

i. **Option B.1**: ECC UC and HANA Migration using DMO with System Move

Pros	Cons
Reduced downtime	Change management would be difficult / challenging
Easy fallback option using DMO with system move, if something goes wrong during go-live	May need to open production for emergency corrections
No increased manual effort terms of developing and testing	Freeze period for development system would be more
No need to maintain additional hardware till go-live	
No need to maintain the list of changes made in both OLD & NEW development systems	

ii. **Option B.2**: ECC UC and HANA Migration without DMO

Pros	Cons
No increased manual effort terms of developing and testing	Change management would be difficult / challenging
No need to maintain additional hardware till go-live	May need to open production for emergency corrections
No need to maintain the list of changes made in both OLD & NEW development systems	Increased downtime
	Fallback to the original system would be time consuming
	Freeze period for development system would be more

2. BW/4HANA Migration

In-Place conversion	Remote conversion
File system conversion of an existing SAP BW installation (Keep Same SID)	Start with SAP BW/4HANA as green field installation (New SID)
Step-by-step in-place transfer of classic objects into their HANA-optimized counterparts	Support of carve-out and consolidation scenarios
Followed by a system conversion to SAP BW/4HANA	Transport data models and remote data transfer [including Unicode conversion]
Minimum start release: SAP BW 7.5 SP5 powered by SAP HANA	Risk mitigation due to parallel system
	Minimum start release: SAP BW 7.0 or higher on any Database

One of the main criteria in choosing an In-Place conversion is following SAP's supported recommendation as DFA ASSIS is currently on BW 7.5 as shown below:

SAP BW/4HANA
Decision Criteria for the Right Path

Criteria *	Path 1 New Install (plus remodel and reload of data)	Path 2 System Conversion	
		In-place	Remote
Is system running on SAP HANA already?	O	++	O
Is system running on SAP BW 7.5 already?	O	++	O

In addition, based on our experience, there are limitations and other considerations with using a Remote conversion approach. For example, some limitations include:

I. The Remote Conversion is currently available as an SAP Early Adopter Care (EAC) program only (per SAP NOTE: 2383530).

II. SAP Landscape Transformation 2.0 (License requirements).

III. SID change (we will be able to overcome this by System Rename after conversion, however it adds downtime and effort).

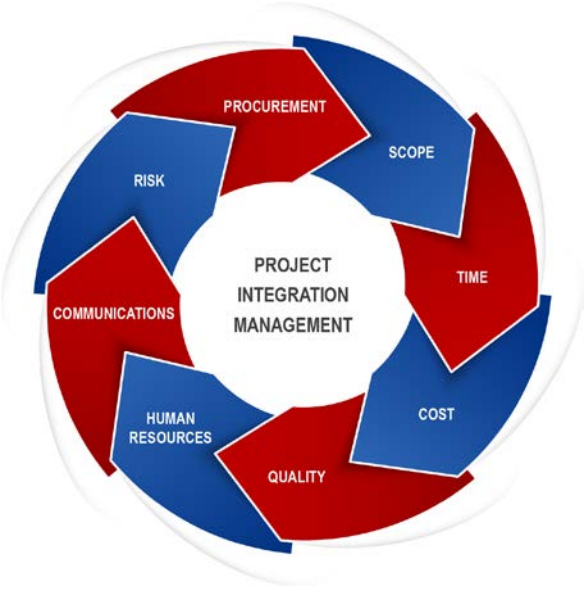
There are also some challenges based on our experience with the Remote Conversion approach such as running 2 BW systems in parallel, synchronizing the data supply, delta management, and managing what data to move to the separate BW/4HANA system. Based on the current environment and business goal of AASIS, our recommended approach is the In-Place Conversion option for BW/4HANA.

2.0 Project Management

Describe your organizations approach in managing this project and how it meets or exceeds the requirements of the RFP.

Team YASH's project management framework is built on and supported by the practices of the PMI's PMBOK and industry standard methodologies, such as Six Sigma, and Agile, to manage quality, risk, and process. An integral part of our approach also includes application of our proven ISO: 9001 accredited QMS, a results-driven framework for establishing consistent and repeatable quality, irrespective of the level of maturity, technologies, or changing IT security standards of each system or component. Our experienced and PMP certified Project Manager (PM), Mr. John Atkinson will utilize our ***Integrated Project Management (IPM) Framework***, depicted here.

Our IPM framework was developed to leverage our Migration Approach for SAP HANA. We will be able to leverage our process to manage the Suite on HANA and BW/4HANA migrations in parallel to meet the milestones required in the RFP. We recognize that our repeatable migration practices take into account the ability of the DFA to absorb the technical changes, to fully test each system, and to prepare DFA staff to support HANA, without making trade-offs between cost, time, scope, and quality. Traditional scope, schedule, and cost management techniques will be used to ensure tasks are completed. Based on DFA needs, our PM can organize task execution by phase, milestone and gate criteria.

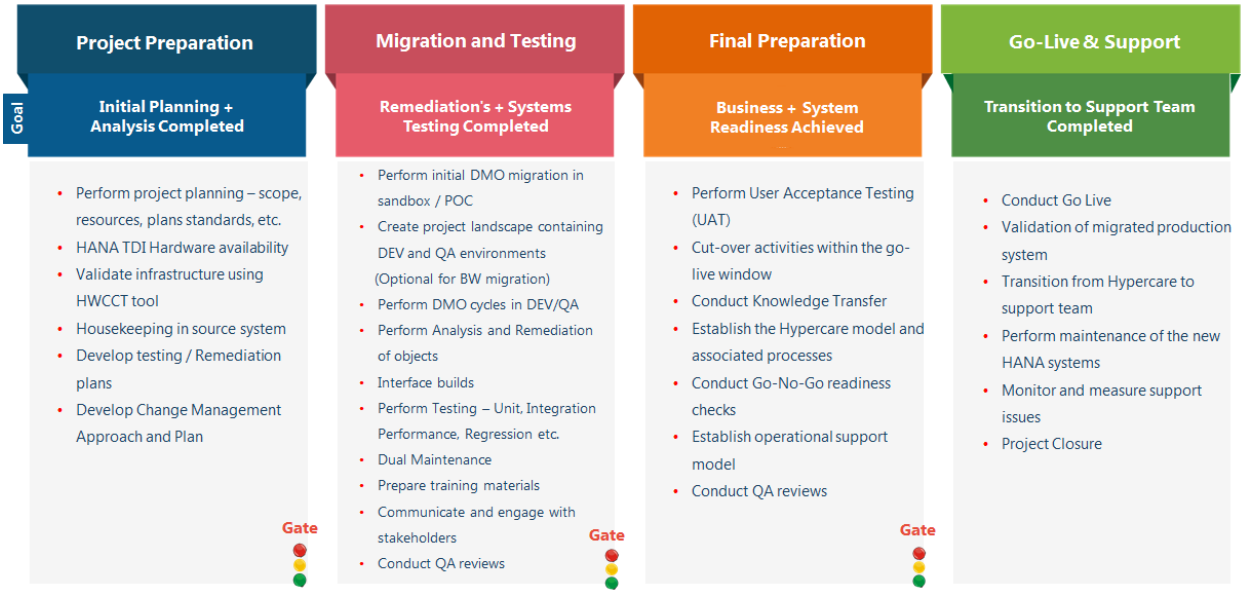


In addition, Mr. Atkinson will provide Weekly Status Reports that summarizes worked performed against defined metrics and status of any outstanding issues. He will lead Monthly Program Reviews to monitor performance against the Quality Assurance Surveillance Plan (QASP) metrics and obtain constructive feedback from DFA to incorporate in to our continuous improvement model.

Team YASH's approach to project management and delivery for this project will be based on the following proven implementation methodology for successful management of HANA migration projects. Our proven methodology enables us to deliver high-quality solutions based on leading practices and leverages over 23 years of successful SAP projects. In fact, we used the following methodologies at our past HANA Migration projects listed in Section T-2 which were similar is size scope and duration as the DFA AASIS ECC and BW HANA Migrations. Performing a Suite on HANA and BW/4HANA Migration is one of Team YASH's core capabilities.

Our HANA Migration Technical Implementation methodology includes tasks, activities and deliverables for:

- Project Preparation – Initial Planning and Analysis
- Migration and Testing – Remediation and System Testing
- Final Preparation – Business and System Readiness
- Go-Live and Support – Transition to DFA Support Team



Project Preparation and Planning

During this phase detail planning both on the hardware, software, resources etc. are done. The project plan for the implementation of the project is conceived and documented which covers the following aspects:

- Project Schedule.
- Resource Plan.
- Communication Plan.
- Change management plan.
- Risk Plan.
- Quality Plan.
- Knowledge Transfer Plan

The activities along with duration, dependencies, to be carried out as part of the project is enumerated and sequenced together to define the project schedule.

Proposed team members and their roles and assignments for the project is listed as part of the resource plan.

The ***Communication Plan*** details the mode of communication with all stakeholders, meetings to be held, phase reviews, Steering Committee meetings on deliverable sign-off and other activities.

Change Management deals with definition of change as referenced with requirements and scope and the process through which a change request is created, reviewed, documented, approved and implemented.

Risks need to be assessed for impact to schedule, cost and quality and suitable mitigation strategies need to be put into place to ensure that the deliverables are not affected greatly and the project plan is adhered to strictly. Suitable contingency plans need to be planned to take care of any eventuality which could affect the project adversely/

The ***Quality Plan*** will be focused on the quality of the work being done to ensure that the required level of quality regarding delivery, schedule adherence, quality of the deliverables is maintained at all times.

The Project Manager will be responsible for all the above project management activities and will be the point of contact between the implementing team and the customer team. YASH brings to the project an implementation methodology with a set of tools and techniques based on its experience with similar projects to ensure the project is delivered in a smooth and efficient manner.

Deliverables:

- Project plan describing the project organization with roles, tasks, and responsibilities, as well as exact timelines, milestones and deadlines
- Project team training
- Defined test focus and framework

Milestones:

- Project Preparation Complete

Migration & Testing

Phase kickstarts the realization by carrying out of system precheck activities. Sandbox Unicode conversion and HANA migration along with unit and regression testing is carried out during this phase. The development Unicode Conversion and SoH Migration is carried out subsequently followed by unit and string/link testing activities. Quality System Unicode conversion and HANA migration is followed by integration, regression, and performance testing.

Tasks

- Migrate Sandbox system to HANA
- Perform initial business tests
- Start application adjustments
- Set up temporary maintenance landscape and prepare development system upgrade
- Freeze development and IT projects that are not part of the upgrade project scope
- Set temporary maintenance development system live and start double maintenance period for emergency corrections in current production system
- Complete applications adjustments (in upgraded development system)
- Update solution operation concept
- Optimize technical downtime
- Migrate Quality assurance system to HANA
- Prepare integration test
- Prepare end-user training
- Perform main Unit, Sting, Integration, Performance and User acceptance test and Regression testing

Deliverables

- Sandbox systems, Development systems and Quality Assurance systems are migrated to HANA
- Double maintenance and code freeze phase for current production environment is in place
- All changes or enhancements to business processes, customizing or custom developments are completed and unit tested in the development system
- Core business processes and interfaces are tested
- Updated solution operation tools and procedures are tested
- Open test issues are documented and for each issue an action plan with completion criteria and upgrade impact description exists.
- Business downtime has been optimized to meet target time windows

Milestones

Solution built

The milestone “Solution Built” represents the point in time during this phase at which all necessary coding, data dictionary or interface adjustments have been completed and passed a first functional unit test. Additionally, the necessary upgrade delta customizing has been completed. When reaching this milestone, the development system has been upgraded and code freeze period has started.

Integration, performance and system tests completed

The milestone "Integration, Performance, and Systems Tests completed" marks the end of all test activities. This includes all unit (developer) tests, application, interface, integration and mass tests as well as all system tests and test upgrades, except a possible final dress-rehearsal test. All test results have been documented and issues have been either resolved or at least addressed. Successfully tested functions are signed-off by business. At this point in time, the quality assurance system of the production landscape has been migrated to HANA.

Final Preparation

User Acceptance Testing (UAT) is carried out to validate the deliverables and confirm them. A detailed UAT plan will be made available which will define the activities to be carried out and scenarios to be tested and approved.

Tasks

- Define detailed cutover schedule
- Define support concept for stabilization phase including additional requirements for staffing, service level agreements, support processes, escalations paths and support infrastructure during this phase
- Perform final User Acceptance Tests
- Sign-off production upgrade by project steering committee and business stakeholders
- Conduct end-user trainings
- Roll-out documentation
- Deploy new productive infrastructure
- Start upgrade prepare phase for long running tasks like incremental conversion (INCV)

Deliverables

- Cut over schedule and upgrade script are compiled
- Final integration and system tests are completed without issues
- Infrastructure is ready for production system upgrade

Milestone

Cutover Prepared

The completion of the cutover planning for the production system upgrade is the final miles-tone before the production system upgrade. All test activities have been completed. Any critical issues have been resolved and documented in the upgrade script. The results and experiences of the tests have been used to create the cutover plan. A (optional) dress rehearsal test (mock upgrade) has been performed based on this cutover plan. A support and disaster handling concept for the production cutover and the stabilization phase after the upgrade has been defined.

As a result of the successful completion of this project phase, the technical upgrade of the production system is signed-off, which includes the go/no go decision by the steering board and the confirmation of the cutover plan.

Cut-over and knowledge transfer activities are also planned during this phase.

Go-Live and Support

Production system migration, validation of migrated production system, perform maintenance of the new HANA systems are carried out during this phase. Hypercare support for a period of 4 weeks after go-live is carried out immediately after go-live.

During this phase, any open issues are addressed and all issues relate to project are closed out before handing over to the support team. The support team will be given knowledge transfer and training to take over the support of the new system once the hyper-care ends.

Tasks

- Migrate production system
- Perform final business user acceptance
- Release upgraded solution for user operation
- Support for the go-live
- Handover solution operation to the operating organization
- Close project

Deliverables

- Production system is migrated to HANA and released for production operation
- Standard operating organization resumes responsibility for the solution
- Project is finally signed off and closed

Milestones

Start of Production

The milestone “Start of Production” marks the end of the migration of the production system and the final sign-off by the customer’s project management including project sponsor, steering committee and business process and IT owners. The major goal of this milestone is to ensure that the core business processes function in the production system landscape. For this purpose, final acceptance tests by IT and business have been carried out. If the upgraded solution cannot be released, the system landscape must be restored to the status prior to the upgrade.

Hand-over to Production

At the project milestone “Hand-over to Production” the solution operation organization resumes responsibility for running the solution. For this purpose, the project team transfers the solution and the updated administration concept to the operation organization. Prerequisite for this step is that the upgraded solution runs stable, consistent and with sufficient performance. After this milestone, the project is closed.

3.0 Change Management

Describe your organizations approach to change management as it relates to the requirements of the RFP.

Our resources are knowledgeable in the SAP Methodology and ITILv3 compliant leading practices. We combine ITILv3 principles, practices, and methods with quality management, change management, and capability improvements that help realize incremental and large-scale improvements in enterprise infrastructure services. We leverage our deep understanding of HANA migrations and our extensive SAP outsourcing support experience to meet the DFA change manage requirements.

We provide a change management plan establishes how changes will be proposed, accepted, monitored, and controlled, while incorporating existing DFA AASIS release management procedures and change control boards. The change control procedures identified in the Change Management Plan will govern changes to the baseline project scope including changes to the work breakdown structure and requirements from project inception through to completion. In addition, the change control procedures will govern changes to the baseline schedule and cost. This Change Management Plan addresses the following activities:

- Identification and inventory of change requests
- Analysis and documentation of the complete impact of requested changes
- Approval or rejection of change requests
- Tracking changes and updating of project documentation to account for approved changes

Change Identification

Any project team member can submit a change request to the Project Manager. When the need for a change to the approved baseline is identified, the change will be clearly defined using the Change Request Form.

- Requestor completes the Change Request Form and submits it to the Project Manager for review.
- Project Manager records the request in the Change Control Log and assigns a change request number to the change request

Change Analysis

- Project Manager will assign a project team member to complete the Change Request Form, which details the work to complete the change and the impact of the change to the project and deliverables.
- Project Manager will determine if the request is viable and decide whether the request merits consideration by the Project Sponsor, Executive Sponsor, and/or change control board (CCB).

Change Request Approval

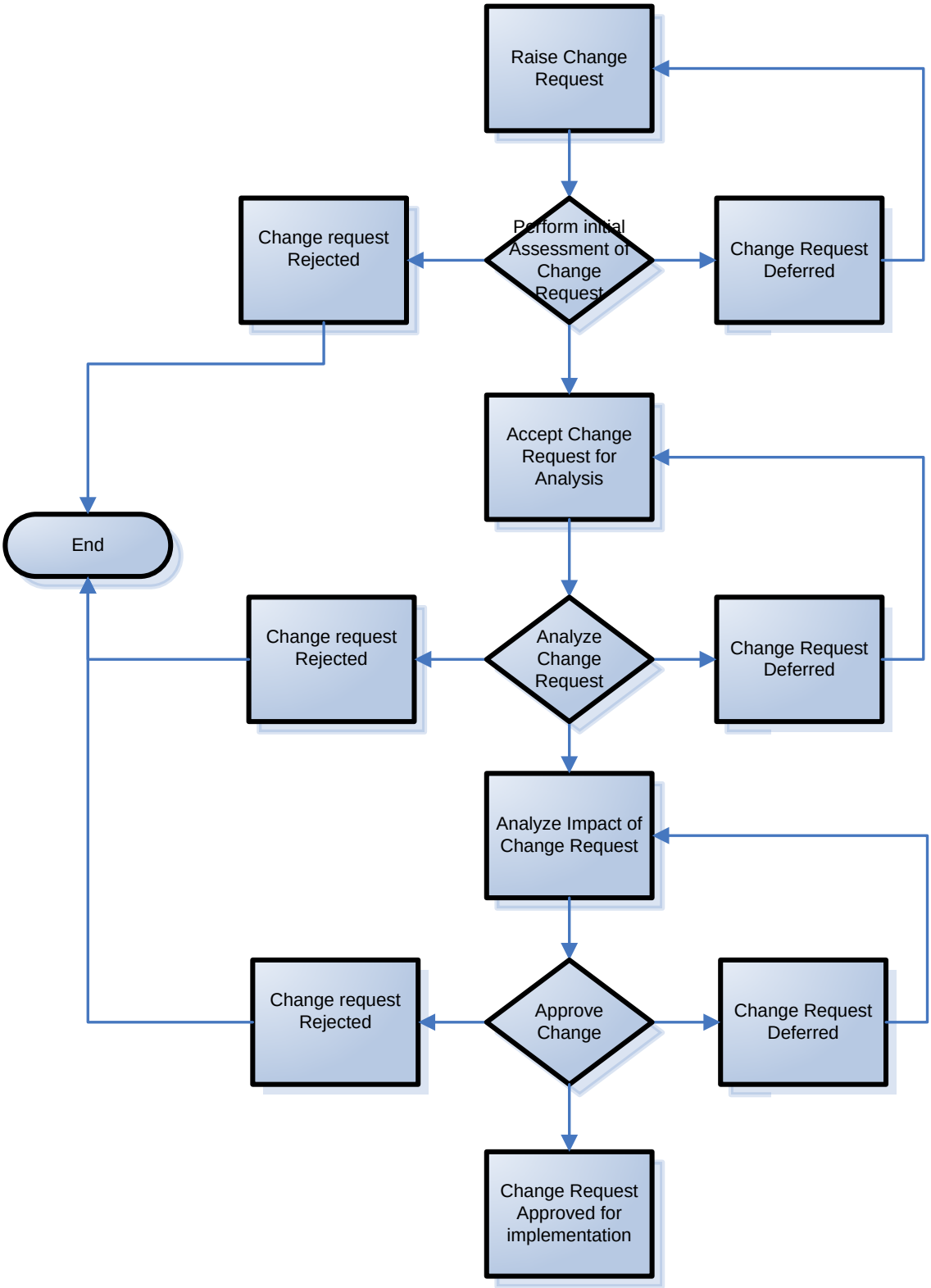
- When the impact of the change has been recorded, the Project Manager forwards the Change Request Form to the Project Sponsor, Executive Sponsor, and/or CCB for acceptance or rejection.
- Project Sponsor, Executive Sponsor, and/or CCB will review the change request and indicate their decisions by completing the Change Request Form and returning it to the Project Manager.
- If approved, the Project Manager will update the appropriate project documentation to reflect the change.
- If rejected, the Project Manager will update the Change Control Log.

General Change Control Process Steps

1. Any project stakeholder recognizes the need for a change and describes it on the change request form
2. Change Manager records the change request on log, and attaches any documentation necessary to completely understand the request.
3. Project Manager immediately defers or rejects the change request if it is not valid.
   - Deferred *Change request*s will re-enter this assessment step at a later time,
   - Rejected Change requests are definitively stopped at this stage of the procedure.
   - For those *Change requests* that are not deferred or rejected determine change board that should be involved.
   - Perform a quick assessment of the potential impact, including an estimate of the costs and time scales for performing a detailed impact analysis.
   - Update the *Change request* form.
4. Change board accepts change request for detailed analysis, defer or reject.
   - Deferred *Change request*s will re-enter this acceptance step at a later time,
   - Rejected Change requests are definitively stopped at this stage of the procedure.
   - Update the *Change request* form to document the decision.
5. Change Manager distributes Change request for analysis to appropriate project members
6. Assigned resources analyze impact of change, including effort estimate and financial impact, within agreed time constraints.
7. Project management collects, consolidates and documents the analysis to show the total impact.
8. Change board approves for implementation, defers, or rejects the change request.
   - Deferred Change requests will re-enter this approval step at a later time,
   - Rejected Change requests are definitively stopped at this stage of the procedure.
   - Update Change request form to document the decision.
   - Obtain signatures.

9. Project manager creates Change order(s) based on Change request.
    - Document Change order(s) ID's in the Change request.
    - Update project management plans and procedures, as required by Change orders.
    - Communicate changes to the team.
    - Monitor progress according to updated project management plans.
    - Document status in Change order(s).
10. Project manager verifies and records completion of Change order(s).
    - Document status in Change order(s).
    - Record completion of Change request.

General Change Control Process Flow



Change Tracking

- Project Manager will maintain a master log of all change requests and the resolution of each request. All requests will be maintained in a Change Control Log.
- For approved changes, the Project Manager will complete the Change Request Form to indicate completion of project document updates and will file the form with other project artifacts.

Please find the below a sample project change request form:

Project Information		
Project Title:	**Project Number:**	
Project Manager:		
Section 1: Change Request		
Requestor Name: Requestor Phone:	Date of Request:	Change Request Number: Supplied by (PM)
Item to be Changed:		Priority:
Description of Change:		
Estimated Cost & Time:		
Section 2: Change Evaluation		
Evaluated by: What is Affect:	Work Required:	
Impact to Cost, Schedule, Scope, Quality, and Risk:		

Section 3: Change Resolution			
Accepted Rejected	**Approved by (Print):**	**Signature:**	**Date:**
Comments:			
Section 4: Change Tracking			
Completion Date	**Completed by (Print):**	**Signature:**	**Date:**
signature above indicates that the project documentation has been updated to accurately and comprehensively reflect the approved changes.			

Please find the below sample change control log template:

Project Information							
Project Title:					**Project Number:**		
Project Manager:							
Change Number	**Description of Change**	**Priority**	**Date Requested**	**Requested By**	**Status (Evaluating, Pending, Approved, Rejected)**	**Date Resolved**	**Resolution/ Comments**

Organization Change Management

YASH's Organizational Change Management (OCM) strategy involves adopting a structured approach to transitioning individuals, teams and organizations from a current state to a desired future state. The OCM assessment that we undertake during the early project phases results in a tailored OCM strategy and plan that focuses on managing and reducing resistance from your impacted users while laying the foundation of user adoption and sustainment. OCM helps drive earlier realization of expected benefits and restore peak performance faster.

YASH's comprehensive Change Management and Training offering and the methodology details are outlined in the diagram below.

Team YASH OCM Strategy

Our Change Management methodology is composed of five distinct phases, that align with the overall project implementation methodology. Each phase comes with its set of activities and deliverables as described below:

Phase	Activities	Deliverables
Project Preparation	• Define the Business Case for change • Define the OCM Governance • Survey/Understand the Stakeholders expectations, hopes and concerns associated with the Project	• Communication Plan/ Strategy
Migration & Testing	• Perform a Stakeholder Analysis • Create the guiding coalition • Determine the Key Business Impact of the solution design on Processes, Roles, Skill requirement, organisational structure etc. • Define the OCM Plan and its component o Tactical Communications plan o Stakeholders engagement plan o Carry out engagement meetings with key stakeholders • Carry out a second and more detailed change impact meeting or workshops to produce a detailed understanding of the to-be roles, responsibilities, skills and Organisation structure • Create the business readiness plan per deployment sites/teams	• Communication and key stakeholder Management Plan • Business Readiness Plan
Final Preparation	• Mobilise sponsors/leaders to raise the level commitment of users • Finalize and carry out readiness plans per areas, leveraging Business readiness teams	• Business Readiness Plan
Go-Live and Support	• Implement User adoption monitoring system • Analyse User adoption and carry out corrective actions as requested	• User Adoption Analysis

Team YASH will work in collaboration with DFA for organization change management activities based on effective and existing change policies and communication outreach. The Team YASH Program Manager and Project Manager will assist DFA in the coordination of relevant OCM activities with the consulting team and impacted DFA stakeholders and users, to ensure smooth transition. More details are described in Section 5.0 Knowledge Transfer.

4.0 Problem Resolution

Describe your organizations approach to problem resolution including an escalation matrix.

YASH practices proactive risk management through development, implementation, and maintenance of a comprehensive Risk Management Plan (RMP). As part of our project management approach we will convene weekly risk management sessions with the DFA Project Manager to discuss potential threats to delivery. The YASH Project Manager oversees the development of the plan where early risk identification is important to lessening impact or aiding in mitigation. RMP's are developed for each facet of the project, with a four-step proactive, formal process, that includes:

- Identifying and documenting risks
- Evaluating risk
- Assigning ownership, planning, and developing mitigation and contingency plans
- Monitoring risks

Also, project prioritization; risk assessment (strategic cost analysis and/or work plan analysis); risk prioritization (to decide the "order of attack"); and risk control (to agree on risk actions/risk plans) will be discussed. For each risk, the following factors are considered: urgency/need to act, impact, proximity, and probability. In agreement with the DFA Project Manager, we will follow the prescribed course of action to remedy potential risk and threat.

Issue Management

It is critical that all issues are documented, prioritized, reported, and mitigated. The YASH project manager will be responsible for the facilitation, capture, reporting, and escalation. Below table provides our approach, with levels of severity aligned to response times.

Level of Escalation	Description	Decision Maker	Time Limit	Action Taken upon Exceeding Time Limit
Level – 1 (High)	Likely to affect Scope (Schedule, Budget, Timeline)	DFA Executive Sponsor	1 Business Day	YASH to propose Scope Change Order; to be mutually agreed between YASH and DFA
Level – 2 (Medium)	Any issue but resolvable within scope	DF Project Manager	2 Business Days	YASH to propose a solution; to be mutually approved by YASH and DFA Project Managers
Level – 3 (Low)	Others	DFA Project Manager	As needed	YASH to propose a solution; to be mutually approved by YASH and DFA Project Managers

Upon issue escalation, the decision maker or someone designated by the decision maker has the specified time period ("Time Limit") to resolve the issue or work out a plan to resolve the issue that is acceptable to both YASH and DFA. If that time period expires, then the YASH Project Manager has the option to take the action specified in the above table ("Action Taken upon Time Limit Expiration").

For the purpose of this process, an "issue" is defined as any obstacle that impedes the team's ability to accomplish the work described in this agreement and achieve client acceptance. "Resolution" is defined as a solution to an issue that is agreeable to both parties and is consistent with this agreement.

Software Problem Tracking and Resolution

An organized and detailed problem tracking and resolution process is critical to successful testing during an upgrade and HANA migration. Team YASH has existing software problem management processes that employ the State's HP Quality Center (HPQC) toolset. We plan to use HPQC to complete the defect tracking process and problem management.

Problems found during integration and user acceptance testing will be logged in the HPQC toolset. Problems are initially prioritized based on the tester's assessment of the criticality of the problem. If this assessment is deemed inappropriate by the testing leads, they may reassign the priority. The team will us the test tool to capture the information shown below:

Data Type	Description
Data Type	Auto-generated, unique problem number
Scenario ID	Number of the test scenario script where problem was identified
Priority	Defines the priority of the problem; used to prioritize work on corrections (critical, high, medium, low)
Logged By	Name of person who logged the problem
Date Logged	Date problem logged
Business Area	Specific business area of the problem (for example, accounts receivable, general ledger, asset management)
Transaction Code	Specific transaction code where problem occurred
Test Type	Testing activity in which the problem occurred (for example, integration, user acceptance, regression)
Short Description	Short problem description
Detailed Description	Detailed problem description

Data Capture at Problem Identification

Problem Assignment and Resolution

Once a Test Problem Report (TPR) has been created, the test coordinator assigns the TPR for resolution. The assigned person researches and resolves the TPR, and then updates the database with the resolution. The problem documentation is then sent back to the appropriate tester for retesting. In addition to containing basic information concerning the TPR and resolution of the problem, HPQC will be used to identify the correction (transport number) and the training impact, if any. The table below shows is snap shot of the elements included in our problem assignment and resolution processes.

Data Type	Description
Assigned To	Name of person to whom problem is assigned
Assigned Date	Date problem is assigned
Development Object	Technical name of development object if development is the source of the problem
Status Update	Information on problem research during the course of analysis, if applicable
Resolution Description	Description of the problem resolution
Resolution Date	Date the problem resolution was entered
Training Impact Description	Description of impact to training (if process change)
Transport Number	Transport number that includes the fix

Problem Assignment and Resolution

Problem Retesting and Closure

Once the TPR has been resolved, the test script in which the error was found is retested. If the test is successful, then the testing tool defect module is updated to close the problem. If the problem is not resolved, it is forwarded back to the assigned person. The table below shows the fields that support this part of the process.

Data Type	Description
Retest By	Person assigned to verify that the problem is fixed
Status	Status of the problem (open, closed, canceled)
Closed Date	Date problem closed

Problem Retesting and Closure

Problem Reporting

Standard reports can be created and presented to the project team. Standard reports, each available by test type, include the following:

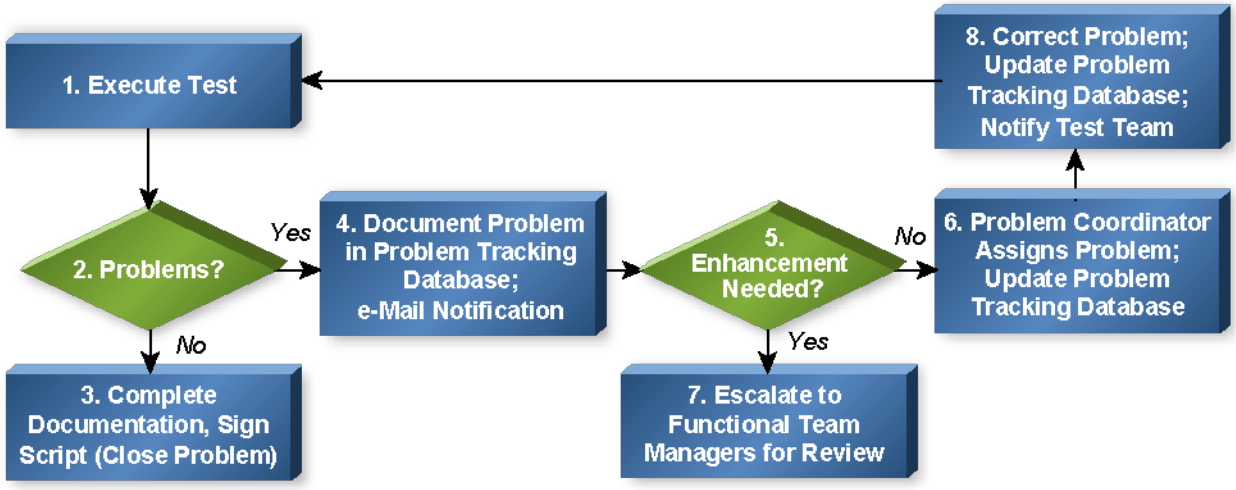
- Open software problem log
- Closed software problem log

Problem Management

Although the problem tracking module is an excellent tool to assist with problem logging, tracking, and resolution, it does not replace the need for problem management. During integration and user acceptance testing activities, daily meetings will be held to review open problems, discuss priorities, plan retests for resolved problems, and discuss issues. These meetings are critical to facilitate communications and keep testing on track.

Problem Escalation

If there are discrepancies within the team regarding problem resolution, the issue is first escalated to the functional area team management for review. Team YASH and State staff members will discuss the issue and identify a direction. If the issue cannot be resolved at this level, it will be escalated to the PMO and Change Board for direction. The figure below depicts the flow of a problem from identification through closure.



1. Test team executes test script.
2. Were any problems encountered?
3. **No problem** —Tester completes test script documentation and signs script. If retest, close problem using problem tracking database.
4. **Yes problem** —Tester documents problem in the problem tracking database and e-mails to the appropriate team/test managers and Problem coordinator.
5. Problem coordinator analyzes problem for design enhancements versus break/fix issues. Were enhancements requested?
6. **No**—Problem coordinator assigns problem to support staff using problem tracking database and e-mails to the person assigned.
7. **Yes**—Communicate to test leaders. Problem status updated to "Enhancement" and problem is closed. Enhancement request is escalated to the functional team managers for review.
8. Support team member corrects problem, updates the problem tracking database with resolution and training impact, and notifies test team of correction. Return to Step 1 and retest.

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Problem Escalation Process Flow

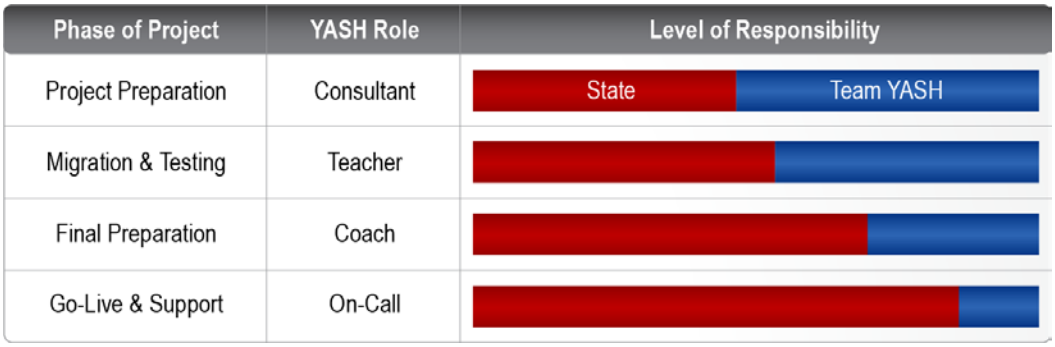
There is a clear escalation process that is applied if there are discrepancies with the team regarding resolution.

5.0 Knowledge Transfer

Describe your organizations approach to knowledge transfer and how you will ensure that State resources will be sufficiently trained prior to Go-Live.

With Team YASH's knowledge transfer approach, DFA staff become experts in SAP HANA and BW/4HANA to the point where we are typically able to achieve the responsibility model depicted below. This lowers overall costs and significantly mitigates implementation risk.

Team YASH consultants mentor, teach, and train Project Team staff during all phases of the implementation. State team members will gain knowledge and insight into business impacts and improvements, SAP HANA and BW/4HANA functionality, implementation methodology, configuration comprehensiveness, programs, and infrastructure so that DFA will be increasingly self-sufficient in implementation and maintenance of tasks over time.



Progressive Knowledge Transfer to the State

Knowledge transfer occurs through formal training, State Project Team Training, as well as informal on-the-job training and job-shadowing. To promote the effectiveness of informal training, we identify a Team YASH counterpart for State project team members.

Application Knowledge Transfer Approach

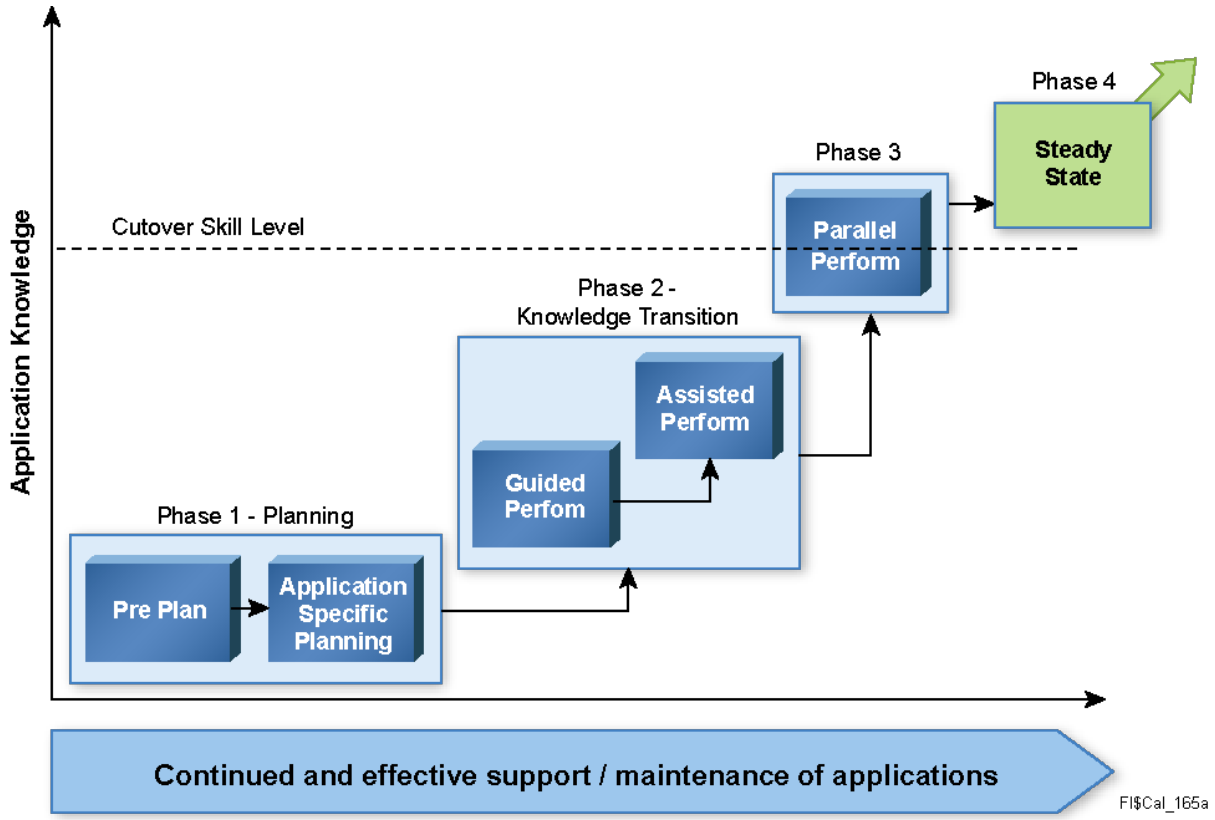
In nearly two decades of delivering successful SAP projects, Team YASH has leveraged and harvested techniques and experience to develop a comprehensive and streamlined knowledge transfer process, allowing a smooth and effective transfer of knowledge from implementation teams to maintenance personnel.

After a successful acceptance test, the AASIS Suite on HANA and BW/4HANA applications are ready to be released or deployed into production. Cutover to production requires preparation for operations and maintenance by developing and/or updating of documentation, putting the necessary organizations in place for support and operations, and providing required education. User documentation must be developed and/or updated and necessary user education must be provided.

The release of the application into production follows IT systems management processes. Team YASH will shift support activities and continue to grow the maintenance team through knowledge transfer activities designed to deliver a seamless progression from implementation to steady state for the maintenance of the HANA environments.

Yean YASH's approach will move some members of the development and testing teams to the maintenance team to enable a more effective support model as the newly migrated HANA application moves into production. By 'seeding' the maintenance team with Subject Matter Experts (SMEs) that bring extensive HANA project experience and existing knowledge of the DFA AASIS environment, Team YASH reduces the risk associated with transitioning the support functions to the maintenance team.

The figure below illustrates the approach Team YASH will follow to confirm that application knowledge transfer has been achieved as the maintenance team grows to support the HANA upgrade implementation into steady state.



System Operation and Maintenance Knowledge Transfer Process

Phase 1 – Planning

The planning activity is done during the Project Preparation phase and after successful testing of the upgrade in Sandbox, Development and Quality Assurance. It includes the following tasks:

- Confirm the scope of transition of the Suite on HANA and BW/4HANA skills
- Confirm availability of trainers and SMEs for the HANA applications
- Develop application-specific transition schedules and milestones
- Plan and prepare an application-specific knowledge transfer plan
- Plan and prepare an application-specific training plan (for application support)

Phase 2 – Knowledge Transfer Guided Perform

The objective of this activity is to expose the maintenance team to the actual tasks they will be performing during the steady state phase. Guided Perform will consist of both classroom and on-the-job training, and will include the following activities:

- Develop an Application Knowledge Repository (AKR) and populate it with technical and business details
- Document processes and procedures to interface with testing and releases
- Establish processes and procedures for the version control and release plan
- Report and track the progress of the transition
- Identify the new training requirements
- Verify availability of the DFA SMEs for training and confirm how long they will be needed

Phase 2 – Knowledge Transfer Assisted Perform

During this phase, the maintenance team will assume a primary role to support and maintain the newly migrated AASIS HANA environments and will perform the tasks necessary to keep the applications operational. The project manager and SMEs will be available to assist with the clarifications required to accelerate problem solving and troubleshooting. Assisted Perform will include the following activities:

- Update the AKR
- Identify and communicate additional training requirements for the maintenance team
- Report and track the progress of the transition
- Obtain additional training required based on the findings by coordinating with the project manager
- Create the draft Application Support Control Plan (ASCP)

Phase 3 – Parallel Perform

During this phase, the maintenance team will assume the leadership role for maintaining the HANA environment. The maintenance team will perform the emergency fix and maintenance service requests. They will involve Team YASH for clarifications only, if needed. Parallel Perform includes the following activities:

- Independently deliver the services for the applications
- Update, validate, and obtain approvals for the AKR and ASCP
- Report and track the progress of the transition

Phase 4 – Steady State

Steady State means a complete transfer of the application into the stewardship of the maintenance team. Performance metrics are continuously monitored for opportunities for improvement during this phase. Steady State will include the following tasks:

- Resolve break/fix tickets assigned to the application maintenance team
- Make code changes
- Test and migrate code
- Respond to user queries on applications that are unresolved by Level 1 and have been transferred to the maintenance team

The Team YASH project manager will conduct regular team meetings to collect status information and address Project team issues. While transitioning knowledge to DFA's team, YASH will provide guidance as to the IT support processes, tools and teams required for DFA to safely and efficiently operate the migrated HANA solution in its environment. YASH shall assess the readiness of DFA's IT support organizations ability to handle the changes caused by the Go-Live of the new solution. We will identify key gaps in DFA's IT roles and responsibilities to support the new SAP environment and YASH will propose a Knowledge Transfer plan to address such gaps. Based on the scope of the RFP our initial focus of Knowledge Transfer will focus on:

- How system refreshes and client copies are impacted or changed
- How support packages are applied and impacted with HANA
- How existing documentation and procedures be updated with the new technical HANA jobs and tasks (e.g. update the with the step-by-step guide to the HANA migration)
- New technologies the State will need to know – i.e. architectural elements such as the Index Server, XS Server, and Name Server
- Managing the relationship between memory and data-persistent processes, and proper administration of the persistence layer itself (log and data volumes)

- With the new landscape, keeping environments in sync with SAP Landscape Transformation Replication Server (SLT), and SAP Data Services used in different real-time replication, and batch ETL contexts.
- BW/4HANA delta skillsets:
    - Examples include increased data modeling capabilities, and information model consumption.
    - Nearline storage (NLS) interface which provides an alternative to traditional data archiving, and Smart Data Access (SDA)
    - Knowledge of user management and access control (i.e. Developers need direct database access, and an understanding of the change control and transport mechanisms available)
    - Data provisioning technologies for Data Mart systems as a means to get data from external systems into the SAP HANA database

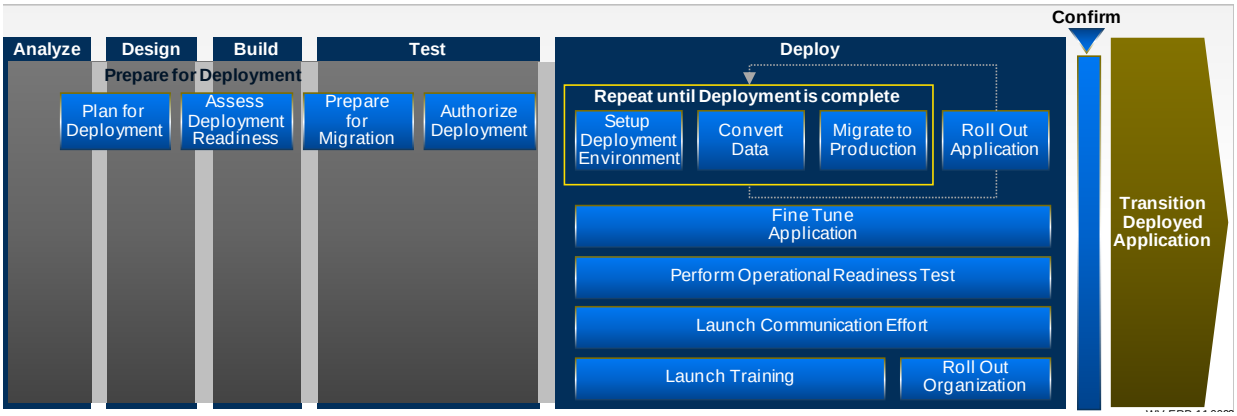
6.0 Managing Go-Live and Post Go-Live Support

Describe your organizations approach to managing Go-Live for this engagement.

Some of the key considerations for the deployment effort include checking the readiness of the application and technical infrastructure, involving DFA ASSIS support for readiness and conducting deployment issue briefings to confirm issues are resolved.

As a part of the Go-Live process we would provide a detailed plan on when and how the application must be rolled out to the target deployment agencies and sites, as well as the tasks necessary to prepare for the roll-out. The plan would also include key stakeholders and their roles and responsibilities.

Our Go-Live Approach below depicts key activities for Go-Live beginning in the Analyze Phase:

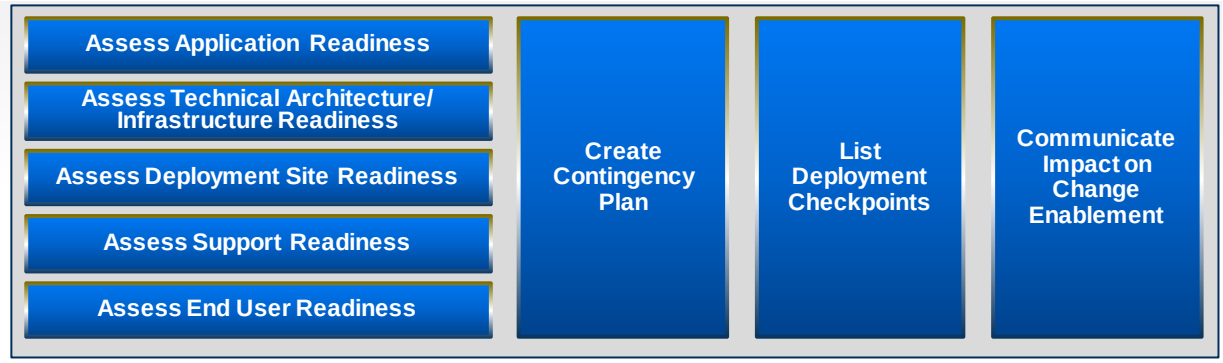


Go-Live Approach

Specifically, the deployment activities include the following:

Plan for Deployment. As a part of this step we establish a framework for all deployment activities and gain an understanding of the stakeholders' expectations. We obtain an early understanding of the effort and resources involved in deployment and assign deployment activities to participants and contributors. We also develop a schedule of deployment activities and required checkpoints.

Assess Deployment Readiness. In this step we assess the readiness to readjust (if required) deployment activities and/or the effort to fully deploy the application to the end user. We then identify various problems that may occur during the go live period and develop a contingency plan to address problems or setbacks that may occur during the deployment window. The issues that can impede deployment success would be resolved before the actual roll-out. The key activities for this process are represented in the below diagram:



Assess Deployment Readiness Process

Prepare for Migration. We would prepare conversion programs to create the live databases for the target application(s) as a part of this step. In addition to this we would develop the procedures to convert and migrate the application data from an existing environment to the target environment and develop test plans for Operational Readiness Test (ORT), which consists of the Deployment Test, Deployment Verification Test, and Operations Test

Authorize Deployment. As a part of this step we would collect the appropriate reports and statements, confirm the deployment plan and verify deployment activities and estimates. We would also refine the deployment plan according to the findings and communicate any changes. In addition to this we would collect readiness statements and confirmations from the project team, from each agency, and from DFA stakeholders to proceed with deployment tasks

Set Up Deployment Environment. In this phase the technology infrastructure environments between deployment units are set up. The deployment unit is brought up to the technology infrastructure baseline required for the business capability

Convert Data. In this phase, data is converted into a format to be used by the new application using the data conversion programs

Migrate to Production. A new version or update of an application is migrated to the production environment for end user access

Fine Tune Application. This phase involves improving the performance and functionality of the application and technical infrastructure and implementing and testing the performance and functionality fixes

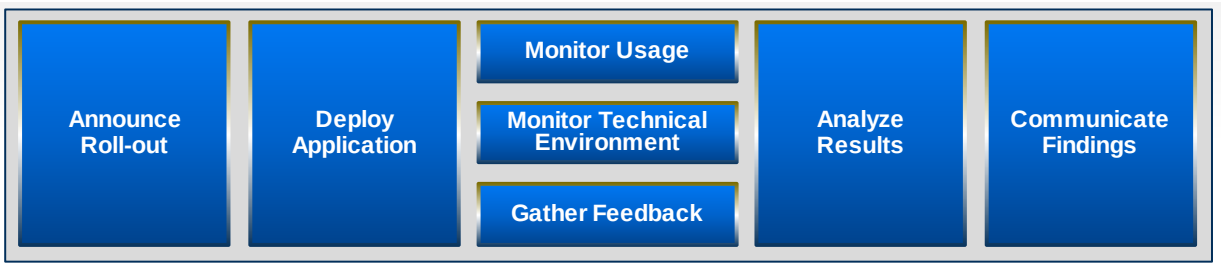
Perform Operational Readiness Test. In this phase tests are executed to check that the application is integrated and functioning properly and its integration into the environment when running at capacity does not adversely affect other production operations. While not explicitly requested, we believe this activity is necessary to help facility a smooth deployment

Launch Communication Effort: This phase involves distributing final deployment communications, including notification of deployment window, system shut-downs, necessary trainings and what to expect post-deployment. Communications should be sent to all key stakeholders and posted on internal State portals as well

Launch Training: In this phase, all trainings are conducted for the necessary functionality and user groups. Training attendance and participation would be tracked and monitored to validate that the end users are being trained.

Roll Out Organization: In this phase, the post deployment support model and organization changes are implemented (in parallel to Roll Out Application).

Roll Out Application. In this phase, dates and details about application roll-out are communicated to involved parties. The application is deployed and its operation is monitored to analyze the findings and feedback about deployment, as defined in the below:



Go-Live Process

Go-Live Deliverables:

- Contingency Plan - This deliverable addresses preparation for "go live." It contains the possible scenarios of problems that could occur when the application goes live, and what to do to revert to normal operations.
- Deployment Cut-over Plan - This document details the when and how for the HANA migration systems as well as the tasks necessary to prepare for the roll-out. This deliverable enables the key stakeholders to understand the deployment activities, including their roles and responsibilities.
- Go-Live Checklist - The objective of the Production Go-Live Checklist is to help confirm that all impacted parties are ready to both complete necessary deployment tasks and prepared for the new application, business processes and support structures

Describe your organizations approach to Post Go-Live support.

DFA would experience a seamless transition to production operations through Team YASHs focus on transition from beginning of the project. To facilitate this focus, members of the support team are involved in the project from the very beginning, to help confirm that the knowledge of the system is grown throughout the life of the project; thus, providing continuity in support after go-live. During post go-live support phase, the system is used productively for day-to-day operations. All the issues and problems are satisfactory addressed. Transition of new systems to production support team will be finalized and phase is signed-off.

The post-go-live support will be handled by YASH onsite/onshore project team and key project resources will be onsite at DFA location. YASH project team will resolve project related issues identified during post go-live support for 4 weeks after Go-Live.

Team YASH would provide onsite post-implementation maintenance and support throughout the phases of the implementation, with additional support offsite. The onsite Team YASH resources would provide full coverage on HANA technologies in the AASIS system and would provide mentoring and knowledge transfer to the State resources.

We would begin full production support after the HANA migration go-live for BW/4HANA and Suite on HANA. Team YASH onsite resources would primarily provide technical and functional support for user reported and system problems. This would encompass the following activities:

- Manage and provide application support for the production components of the HANA systems
- Manage, guide and direct low risk support activities to State staff
- Manage and perform system testing for items requiring a system change
- Create or update training materials to reflect system changes
- Provide advisory support on organization change management impacts
- Help confirm any changes to the production environment are reflected as required in ongoing development (i.e. migration and change control)

The DFA AASIS support team will have the following responsibilities:

- Operate the help desk and track problem reports
- Manage user security profiles
- Provide super users with sufficient knowledge of the newly migrated HANA systems and State business processes to perform initial problem identification and act as the initial point of contact with the user community
- Perform some support responsibilities to facilitate knowledge transfer under the management and guidance of Team YASH
- Perform user acceptance testing of any system changes

- Provide any required additional training of end users, leveraging training materials developed by Team YASH
- Manage organizational change impacts, with advisory support from Team YASH
- Establish and monitor with Team YASH the knowledge transfer plan

Hyper care planning should encompass each of the following elements:

- Key Performance Indicators (KPIs) or Metrics to measure progress
- Central help desk plan for logging and resolving issues
- Escalation plan so that major issues that hinder operations are prioritized and resolved in a timely manner
- On-site support plan including staffing schedule, defined roles and responsibilities
- Communications plan for reporting progress, issues and other important items to senior management, the project team

7.0 Payment Milestone

The State described the preferred payment milestone schedule in Section 2.15 of the RFP. Please describe your organization's suggested milestone schedule and why you feel it is a better approach. Note: Section 2.15 states that the State shall not pay more than 50% prior to Go-Live.

Below is the milestone based payment schedule for this engagement. Team YASH does not propose any changes to the States suggested payment milestones and will work closely with DFA to determine the appropriate sign-off criteria for each milestone.

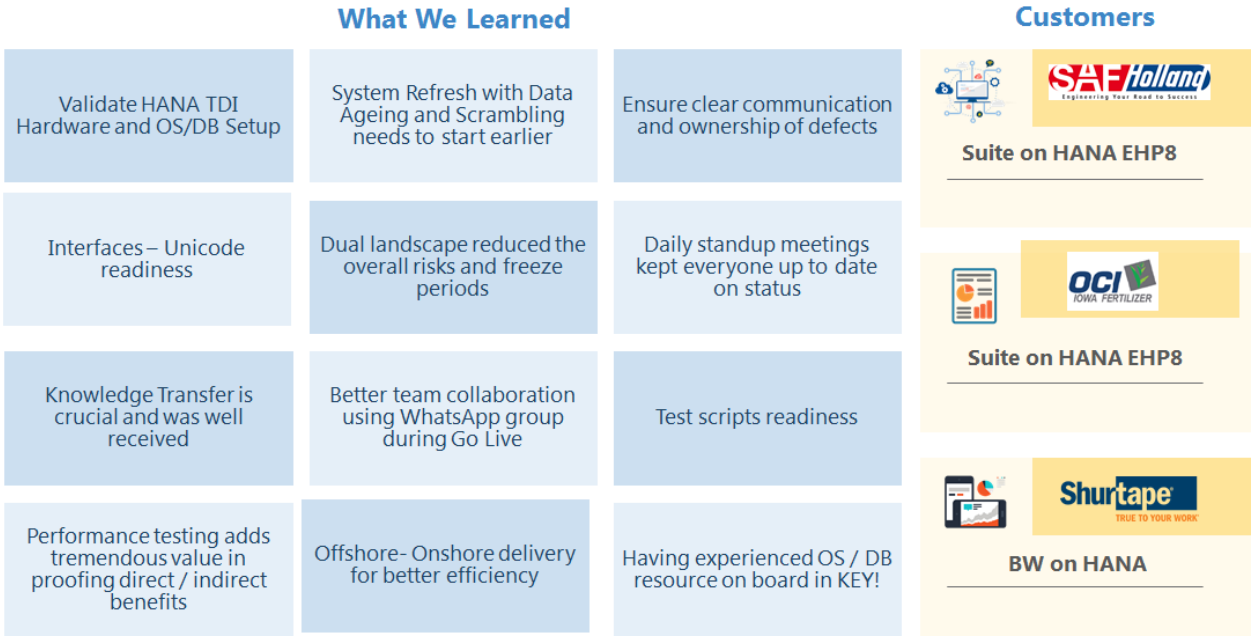
Project Milestone	% of Fee Payment
Sandbox Installation / Completion	10 %
Development / QA Completion	15 %
Completion of User Acceptance Testing and Go-Live	25 %
Completion of Post Go-Live Support	50 %

8.0 Lessons Learned

Please describe any "lessons learned" from the Prospective Contractor's relevant experience and how those lessons learned will impact the Prospective Contractor's approach to this engagement.

Team YASH's 22 years of experience implementing, upgrading, migrating, outsourcing and supporting large complex SAP programs including 23 recent HANA projects has helped us develop significant lessons learned. We will bring these to the State during this project and will leverage these lessons learned in developing our approach and detailed plan. Several of the key Lessons Learned are outlined below:

- **HANA supported file system during RHEL installation**
    - During the installation of RedHat Enterprise Linux for SAP HANA, it is recommended to choose the file system which is supported to avoid further issues post installation
- **Allocate required storage for each mount point**
    - Allocate the storage as per the requirements only. It is not recommended to allocate additional storage, particularly for SWAP mountpoint.
- **Run system statistics before starting the migration of each system**
    - In the previous projects we have learned that if the statistics of the sources database are not up to date then it may lead to performance issues during preparation phase
- **Table partitioning not happening correctly**
    - We faced this issue which was due to bug in SUM tool, which was corrected in next version. It is recommended to use latest version of SUM tool.
- **DMO and testing in production size box**
    - As per our experience, it is very important to carry out all the testing and DMO activities in the lower environments having the hardware size equal to production system hardware size.
- **Sandbox system for pilot migration**
    - Based on our previous experience, carrying out migration in production size sandbox system is very helpful in shorting the freeze period and uncovering the potential issues and risks
- **Use a full-size copy of production -** The full database size should be included in a production copy, and for a cutover plan you have the beginnings of the timings, on a simulation of production you can build a detailed run book based, and the current code set
- **Prepare BW dependencies list** as far as BPC or BO is concerned before starting the project.
- Prior to begin the migration, **perform housekeeping undertakings** to erase undesirable information from database which will diminish downtime for migration.
- Use **Table splitting** for bigger tables


What We Learned
Validate HANA TDI Hardware and OS/DB Setup
System Refresh with Data Ageing and Scrambling needs to start earlier
Ensure clear communication and ownership of defects
Interfaces – Unicode readiness
Dual landscape reduced the overall risks and freeze periods
Daily standup meetings kept everyone up to date on status
Knowledge Transfer is crucial and was well received
Better team collaboration using WhatsApp group during Go Live
Test scripts readiness
Performance testing adds tremendous value in proofing direct / indirect benefits
Offshore- Onshore delivery for better efficiency
Having experienced OS / DB resource on board in KEY!
Customers
SAF Holland
Suite on HANA EHP8
OCI IOWA FERTILIZER
Suite on HANA EHP8
Shurtape
TRUE TO YOUR WORK
BW on HANA

9.0 Issues, Challenges and Potential Risks

DFA is interested in any information that may help to identify issues, clarify the requirements, reduce risk of the procurement, and identify issues and challenges of managing and implementing the proposed Solution. Describe the primary concerns, risks, issues and recommendations for DFA as it proceeds with this SOW.

Team YASH's experience led us to understand one of the most important factors for a successful HANA implementation project—success is so much more than simply getting the software to "work."

Over the last 22 years, Team YASH has implemented hundreds of SAP projects and HANA migrations, including 23 recent HANA 2.0 customers. Team YASH brings this experience to DFA. Our proposed solution considers these experiences, which we have already incorporated throughout our proposal.

The combination of our unique knowledge of the DFA AASIS environments and our SAP HANA implementations in the public and private sectors reduces risk and delivers a maximum quality Suite on HANA and BW/4HANA implementation

Although a comprehensive list of challenges can be extremely long and detailed, we have summarized them down to the most prominent ones for DFA to consider.

Potential Risks and Challenges

- Establish strong governance and disciplined program management
- Staff the project appropriately
- Determine the right implementation approach and schedule
- Prepare early for transition and post-implementation support
- Project timelines may be at risk if the hardware procurement is delayed.
- Hardware should pass SAP HWCCT test for a successful installation of HANA DB. If the Hardware configuration check tool test fails on any of the server's hardware, it is not recommended to use that hardware. Instead, that hardware needs to be replaced by the vendor with the good one.
- Open incidents with SAP for pre- and post-go-live service sessions for smooth pre-and post-go-live.
- Unavailability of dual landscape for ECC UC conversion and HANA upgrade.
- SOA and third-party vendors support during the project is a key component impacting the overall project timelines because it is important activity to re-establish the working interfaces of SAP ECC and BW systems
- Multiple product migrations.
- Test cases and test scenarios are one of most essential elements for a successful project. Please make sure that test cases and test scripts are available for the critical and important business processes.

Template T-3

Prospective Contractor Engagement Organization and Staffing

Response Template

YASH Technologies, Inc.

RFP #: SP-18-0087

Table of Contents

1.0 Engagement Organization and Staffing Plan

The Prospective Contractor should describe an integrated Project Organization and Staffing Plan required to execute the proposed approach for the Engagement. This section should include details of the Prospective Contractor's team, proposed use of subcontractors, and the Prospective Contractor's expectations of DFA resources. This section should include a visual representation of the Prospective Contractor engagement including the reporting structure. The Prospective Contractor should also describe the required staffing of business and technical resources DFA will need to provide to support the delivery. The Plan should include the number of resources (both business and technical), anticipated role and responsibilities, level of participation and necessary capabilities/skills for both DFA and Prospective Contractor resources.

Key Project Personnel identified in the Proposal for the engagement are considered to be the core Prospective Contractor resources and are therefore expected to be the major participants in all procurement activities and services delivery activities. If the Prospective Contractor is selected, its Key Project Personnel cannot be replaced without prior DFA approval during the life cycle of the Project.

Instructions: Provide a Staffing Plan and associated organization chart detailing the number of personnel, level, roles and responsibilities, team reporting relationships, and then identify the approach to providing "shoulder-to-shoulder" links for key staff roles between Prospective Contractor staff and DFA staff. Show proposed Prospective Contractor personnel hours by phase, by personnel level, and by role for the entire engagement. Identify all Key Project Personnel for the Prospective Contractor, personnel for DFA and their proposed roles. If the Prospective Contractor's proposed engagement organization and staffing plan does not align with the guidance provided in the body of the RFP the Prospective Contractor should discuss the justification for recommending an alternative staffing organization.

Team YASH

Team YASH has put a tremendous amount of effort and focus into identifying, qualifying and securing our team of industry leading SAP professionals. We are confident that the team we have put together is a team that not only has the skills and expertise to successfully deliver a quality solution for the State of Arkansas Department of Finance and Administration (DFA) but we feel our team is uniquely suited to address the specific challenges that are encountered during SAP HANA and BW Migration projects in the Public Sector.

In an effort to ensure that we have enlisted the support of the best and most relevant team members for the State's needs, YASH has teamed up with partners Genesis Consulting and Plan B IT Consulting to provide the specific talent required for this project. This combination of teams brings the right level of experience to DFA as well as mitigates implementation risks.

Subcontracting Strategy

YASH will be the prime contractor on this project and will subcontract with Genesis Consulting and Plan B IT Consulting. Regardless of the contracting relationships, Team YASH will present itself as one team working side by side with the DFA technical and business team members.

Genesis Consulting: Genesis is recognized in the market as a specialist in SAP Public Sector functional and technical implementations. Genesis has extensive experience in supporting State and Local customers in their upgrade and migration projects. Genesis' tenure and expertise in these areas have helped them build a strong network of talent that allows them to provide the best consultants by leveraging a very experienced SAP network.

YASH has a long-standing relationship working with Genesis Consulting. We have worked on various SAP implementation, development, and support projects in the Public and Commercial sectors. The State will be able to leverage our close, ongoing working relationship to be working with one team.

Plan B IT Consulting: Plan B IT Consulting is an organization that brings a tremendous amount of SAP Public Sector as well as extensive State of Arkansas AASIS knowledge and experience. Plan B is a State of Arkansas Local Small Business, with years of experience with the current SAP system infrastructure at the State of Arkansas. They have been working with DFA through the AASIS upgrades and enhancements to the SAP infrastructure landscape and will be a key part of the planning, approach, and delivery of this project.

Genesis and Plan B IT Consulting have also been working together on various projects at the State of Arkansas including State of Arkansas State of Arkansas EASE Time and Leave Project and the State of Arkansas EASE Performance, Goals, and Compensation initiative.

Together Team YASH is excited to be able to provide this level of talent for the State of Arkansas DFA SAP HANA and BW Migration project.

Integrated Team Approach

Team YASH brings to the State of Arkansas a team of experts that are experienced in leading SAP HANA and BW migration projects, as well as bring leading edge solutions, and an extensive amount of industry and SAP experience to this DFA initiative.

The project team structure, is based on an integrated and collaborative team effort, drawing resources and skills from DFA and Team YASH. The structure is designed to ensure a smooth implementation and support knowledge transfer to DFA so that DFA can establish a core competency in the operation and maintenance of the SAP systems after Go-Live.

The overall execution and governance of this project engagement will be driven by a project charter. The project charter will be prepared by Team YASH and mutually agreed by DFA and YASH Project Managers before the start of the engagement.

Project Structure

Team YASH takes an integrated approach to delivering our projects. We will work side by side the State of Arkansas team members to ensure ongoing knowledge transfer throughout the project. We have proposed integrated teams that include both DFA and Team YASH members. A brief description of the key team areas includes:

Project Sponsor: A State of Arkansas DFA senior management role that typically involves approving or supporting the allocation of resources for the initiative, defining the goals and assessing the eventual success. The Project Sponsor will be the champion or advocate for the project to support alignment and acceptance within the business.

Executive Steering Team: The Executive Steering Team is comprised of members from both DFA and Team YASH. The DFA members should be executive-level individuals that represent various business and technical stakeholder areas that will be impacted by the initiative. This group will meet regularly and will provide overall leadership and alignment for the overall direction of the project. The executive steering committee ensures that a project stays on course and helps secure buy-in at all levels of the organization. The Executive Steering team also approves project changes and decisions.

Project Manager: The Project Manager oversees all activities related to the SAP Migration project. Ensures that all project goals are accomplished according to specifications and business objectives. Provides input to strategic decisions that success of the project. Oversees the project budget, resource plan, and deliverable and milestone delivery. Supports issue management and risk mitigation planning and strategies. Supports PMO activities including key project metrics and overall quality of the solution being delivered.

Project Audit and Oversight: Provide an independent review and analysis of key project milestones and deliverables to determine if the project is on track to be completed within the estimated schedule and cost. Ensure that the intended objectives and benefits of the project are met with the delivered capabilities and solutions.

Technical Team: For the SAP HANA and BW Migration Project, the Technical Team will be comprised of several key areas. These include:

- *HANA and Infrastructure* – Knowledge and understanding of existing SAP environments including hardware, operating systems, SAP Basis/NetWeaver, SAP HANA.
- *Business Intelligence* – Team members are knowledgeable on BW reporting requirements and set up. Support the team in the configuration, migration, and testing of the BW on HANA solution.
- *Application Development* – ABAP development to support changes and updated to technical development objects including custom tables/programs/objects, interfaces, reports.
- *Security* – Support the configuration and testing of security environment for roles and authorizations.

Business/Functional Team:

- *Finance* – Knowledge and understanding of SAP Financial, Controlling, and Funds Management. Support the team in understanding and validating business requirements and solution functionality.
- *Human Capital Management* - Knowledge and understanding of SAP Organizational Management, Personnel Administration, Payroll, Time/Leave Administration, and Benefits. Support the team in understanding and validating business requirements and solution functionality.
- *Logistics* - Knowledge and understanding of SAP Materials Management, Procurement for Public Sector, Plant Maintenance, Fleet Maintenance for State Police. Support the team in understanding and validating business requirements and solution functionality.

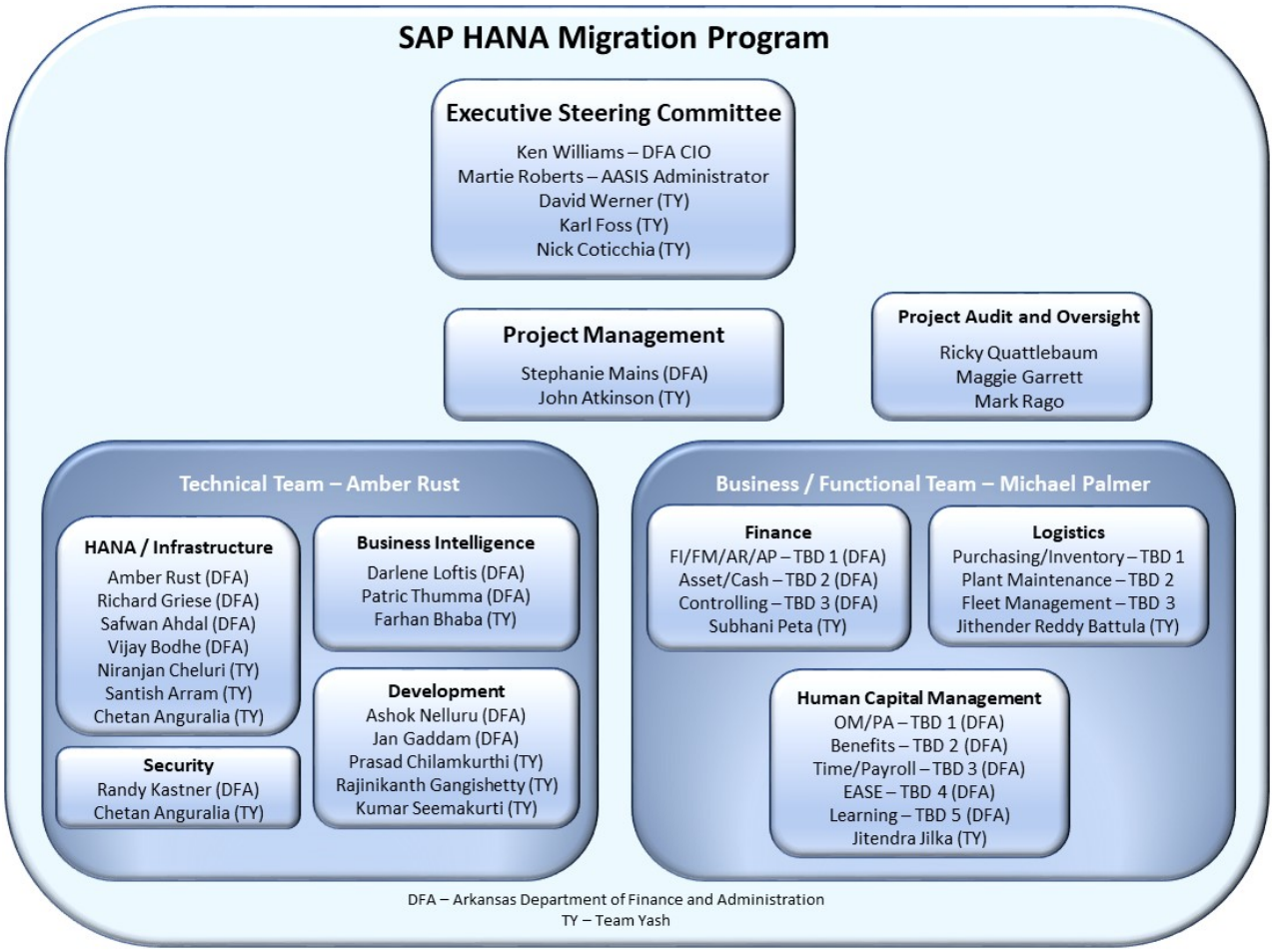


Figure 1: Project Team & Reporting Structure

Proposed Team YASH

The team of consultants that Team YASH is proposing to the State of Arkansas for the SAP HANA and BW Migration project brings on average over 15 years of SAP experience with nearly 12 years of experience implementing SAP Public Sector Solutions. Our team brings depth and strength in all the key areas we feel DFA will want to provide special attention as we work through the SAP HANA and BW migration. Some of the areas our team has specific expertise and experience are around the technical requirements for implementing an SAP Suite on HANA environment, migrations from ECC to HANA, and the design, configuration, integration and testing of SAP Public Sector solutions including Financials, Controlling, Funds Management, Logistics and Human Capital Management.

Our proposed team also has experience implementing SAP solutions at the State of Arkansas including the EASE Time and Leave Project, EASE Procurement Project, and EASE Performance, Goals, and Compensation implementation.

Together, Team YASH has had significant accomplishments during their SAP implementation careers. Our team includes skilled consultants that have incredible achievements and accolades. DFA will be able to leverage this extensive experience and impressive talent. Some of the outstanding credentials from the proposed team include:

- Experience with 20+ HANA upgrades/implementation projects
- 8 SAP Certified consultants with 4 SAP HANA certified team members
- Our team has worked on 10+ BW implementation/upgrade projects
- Our SAP Project Managers have managed over 35+ projects and over 400 personnel
- Average 13+ years of SAP experience with a total of 50+ years SAP experience
- Our HANA Migration Specialist was awarded a Certificate of Achievement - For outstanding performance and lasting contribution in implementing one of the largest SAP deployments in the world (Applied Materials - Santa Clara CA).

The following table is a summary of the proposed team members, their qualifications, competency and experience.

Name / Role	Qualifications	Competency and Experience
John Atkinson *Project Manager (Key)*	• BA Hons, Economics • University of Lancaster, England • PMP Certified (Project Management Institute)	• 13+ years of experience in SAP solutions • Delivery Executive, Delivery Manager, Program Manager • Extensive experience in SAP HANA – Implementation, Upgrades, Migration projects • Experience with Project and Program Management, SAP Implementations and Support, IT Consulting, Agile/ Scrum/ Waterfall SDLC
Niranjan Cheluri *HANA Migration Specialist (Key)*	• Certified SAP HANA Migration Consultant • SAP Certified Technology Specialist - SAP HANA Installation	• 11+ years of experience in SAP Basis Admin, SAP Business Intelligence, SAP Solution Manager, SAP Basis Architect, BI HANA, S/4 HANA implementation and Migration • Five (5) HANA projects with two (2) migrations and three (3) Upgrade Migration on HANA • Extensive involvement in System landscape planning and design, installations and post installation, Maintenance, Upgrade and Cutover Phases of SAP • Experience in SAP ECC 6.0 system HANA migration with DMO tool
Sathish Kumar Arram *SAP Infrastructure Consultant (Key)*	• SAP Certified Support Associate - SAP HANA (C_HANASUP_1) • SAP Certified Support Consultant on mySAP All-in-One (C_PXSUP_90)	• Working with YASH Technologies, Inc as an SAP BASIS Consultant from December 2016 to present. • Worked with YASH Technologies-India as a Lead Consultant, SAP Basis from March 2008 to December 2016

Name / Role	Qualifications	Competency and Experience
	• Master of computer applications	• Worked with Hewlett-Packard, Global Support Center Bangalore as a Technical Support Engineer from October 2006 to February 2008
Prasad Chilamkurthi *Development Lead (Key)*	• SAP Certified Application Associate - SAP HANA • Certified SAP ABAP Consultant	• Certified SAP HANA Application Associate • 13 years of SAP ABAP experience • ABAP experience covering CRM, WebDynpro, HANA, BI, BW BPC, Enterprise Portal, and Business Objects • Strong experience in designing and developing solutions for Interfaces and Workflow and BADIs and BAPIs
Karl Foss *Program Manager*	• PMP Certified • 7+ years of experience working with the State of Arkansas as a Strategic Advisor and Program Manager	• 16+ years of experience as a Project Manager for SAP application implementations, upgrades, and migrations. • AASIS upgrades and enhancements to the SAP infrastructure landscape • Arkansas EASE Time/Leave Project • Arkansas EASE Procurement Project • Arkansas EASE Performance, Goals, and Compensation
Chetan Anguralia *SAP Basis SME*	• SAP Certified Support Associate - SAP HANA 1.0 • 3+ years of AASIS Basis Experience	• 13 years of SAP Basis and NetWeaver Experience • SAP Modernization Project consultant with the State of Arkansas since 2015 • Deep understanding and familiarity with the State's SAP landscape and people
Farhan Bhaba *SAP BW Consultant*	• SAP BW Certified Solutions Consultant • Publication: "Transcending Data Warehouses via SAP HANA"	• Over 15+ years of SAP Business Intelligence/Business Warehouse and Business Objects experience • SAP Analytics Solutions consultant that specializes in architecture and design for SAP BW/4HANA and BOBJ. • Extensive experience in development of SAP BI/BW solutions utilizing BW/4HANA, SAP BW on HANA, BOBJ Analytics, Tableau as well as extensive ABAP/4 based customizations. • Experience in Public Sector, Manufacturing, Pharmaceuticals, and Retail.

Name / Role	Qualifications	Competency and Experience
Jitendra Jilka *SAP HCM Consultant*	• SAP America certified HCM architect (SAP Certificate# 0008127856, SF Employee Central)	• Over 17 years of experience implementing SAP HR Module and 10+ full life cycle implementations. • Extensive experience implementing SAP HCM, CATS, OM/PA, ESS, MSS, US, Canadian and International Payroll, Time, Travel, 3rd party Interface, FICO integration, BI reporting, Kronos, ADP Integration, SF-HCM Add-on, HCI Integration, Data Migration, FIORI, HR Renewal, NetWeaver portal, Success factors Employee Central. • Over 25 years of experience helping global companies to improve efficiency and effectiveness through the application of innovative and state-of-the-art IT solutions. • Expert in articulate to the client HR business processes and translate to optimal and suitable SAP technology solutions.
Subhani Peta *SAP FI/CO/FM Consultant*	• SAP Certified Financial Solution Consultant (ECC 6.0) • Master's Degree in Computer Engineering	• 14 years of functional expertise in SAP with touch points in customizing, configuring, integrating, SAP FICO module- PSM, FI-GL, FI-AP, FI –FSCM, FI-AR, FI-AA, FI-SPL, CO-CCA, EC-PCA, CO-PC, CO-PA • 6 Full Life Cycle implementations of SAP R/3 system including Business process, Re-engineering, configuring and testing • Strong system analysis, problem solving, and teamwork skills to continue to deliver value-added processes as an ERP (SAP) Business Architect • Clients include Discovery Communications (MD), Fairfax County (VA) Government and Public Schools, Westcon (NY), Bosch (IL), Monsanto (MO), Reliant Energy (TX), PG&E Gas (OR)

Name / Role	Qualifications	Competency and Experience
Jithender Battula *SAP MM/PM Consultant*	• SAP Certified MM Consultant • Master Degree in Logistics, Materials, and Supply Chain Management	• 10+ years of extensive work experience and expertise as a Sr. SAP MM/WM consultant. • Worked in variety of industry sectors specializing in Public Sector, Chemical, Manufacturing, Automotive, and Pharmaceutical. • Completed 5 end-to-end full-cycle Implementation projects • Worked as a P2P and MM Lead in multiple implementations with strong configuration experience. • Extensive work experience on Requisitions, Contracts, Scheduling Agreements, Invoicing, RFQs, PR/RFQs/PO/SO/release procedures and confirmations, pricing procedures, Quota arrangements, source least, Info records, Vendor Evaluation, Master records.

Key Personnel are committed to this project should Team YASH be selected as the solution provider. Non-Key personnel will be finalized after the project confirmation based on the resources availability. Similar profile resources will be provided if the named resources in this proposal are not available.

We understand that it is important to manage for continuity on projects with the size, scope, and lead time of this Program. Maintaining the knowledge acquired by the team would be key efficient execution of the work.

Team YASH will provide a detailed roll-on and roll-off plan for all resources confirmed, for this Project. This staffing plan would be kept up to date as part of the activities of the joint Program Management Office. The updated roll-on and roll-off plan would drive the staffing decisions of the program.

Many programs exist within YASH to maintain and improve the motivation of the team members:

- Performance Management: This is a comprehensive program to provide personal objectives to individuals, measure results and give feedback on a quarterly basis.
- People Satisfaction Survey and Engagement Index: Periodically, company-wide surveys are taken to measure the general satisfaction of our people working on our projects. Actions are taken based on the resulting scores.

Lastly, YASH would not actively remove any team members from the project during the execution of the initial scope. In cases where project resources would leave Team YASH or need to leave the project for personal reasons, YASH would work with DFA on the transition, and readily provide replacement resources that meet the requirements of the specific role.

Proposed Staffing Plan – Team YASH

The proposed staffing plan for the SAP HANA and BW migration project for Team YASH is included in the exhibit below.

TEAM YASH STAFFING PLAN									
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	
Project Preparation Sandbox Installation/Complet	Milestone #1								
Development/QA Completion	Milestone #2								
Completion of UAT and Go-live	Milestone #3						BW4H	SoH	
Completion of Post Go-live Support	Milestone #4								
ROLE	**NAME**	**Month 1**	**Month 2**	**Month 3**	**Month 4**	**Month 5**	**Month 6**	**Month 7**	**Total**
Project Preparation Sandbox Installation/Completion									
Program Manager	Karl Foss	64	56	-	-	-	-	-	**120**
Project Manager	John Atkinson	160	140	-	-	-	-	-	**300**
HANA Certified Migration Specialist	Niranjan Cheluri	160	140	-	-	-	-	-	**300**
ABAP Lead	Prasad Chilamkurthi	160	120	-	-	-	-	-	**280**
SAP Technical Infrastructure Consultant #1	Sathish Kumar Arram	160	120	-	-	-	-	-	**280**
ABAP Consultant#1	Rajinikanth Gangishetty	40	120	-	-	-	-	-	**160**
SAP HCM	Jitendra Jilka	40	120	-	-	-	-	-	**160**
SAP Financials (FI/FM/CO)	Subhani Peta	40	120	-	-	-	-	-	**160**
SAP Logistics (MM/PM/Fleet)	Jithender Reddy Battula	40	120	-	-	-	-	-	**160**
DFA SAP AASIS SME #2	Chetan Anguralia	160	160	-	-	-	-	-	**320**
ABAP Consultant #2	Kumar Seemakurti	16	80	-	-	-	-	-	**96**
SAP BW Consultant	Farhan K Bhaba	160	160	-	-	-	-	-	**320**
	Subtotal Milestone #1	**1,200**	**1,456**	**-**	**-**	**-**	**-**	**-**	**2,656**
Development/QA Completion									
Program Manager	Karl Foss	-	8	64	64	16	-	-	**152**
Project Manager	John Atkinson	-	20	160	160	40	-	-	**380**
HANA Certified Migration Specialist	Niranjan Cheluri	-	20	160	152	24	-	-	**356**
ABAP Lead	Prasad Chilamkurthi	-	40	160	160	80	-	-	**440**
SAP Technical Infrastructure Consultant #1	Sathish Kumar Arram	-	40	160	160	80	-	-	**440**
ABAP Consultant#1	Rajinikanth Gangishetty	-	16	112	112	80	-	-	**320**
SAP HCM	Jitendra Jilka	-	-	56	96	80	-	-	**232**
SAP Financials (FI/FM/CO)	Subhani Peta	-	-	56	96	80	-	-	**232**
SAP Logistics (MM/PM/Fleet)	Jithender Reddy Battula	-	-	56	96	80	-	-	**232**
DFA SAP AASIS SME #2	Chetan Anguralia	-	-	160	160	-	-	-	**320**
ABAP Consultant #2	Kumar Seemakurti	-	-	112	88	-	-	-	**200**
SAP BW Consultant	Farhan K Bhaba	-	-	160	160	-	-	-	**320**
	Subtotal Milestone #2	**-**	**144**	**1,416**	**1,504**	**560**	**-**	**-**	**3,624**
Completion of UAT and Go-live									
Program Manager	Karl Foss	-	-	-	-	40	16	-	**56**
Project Manager	John Atkinson	-	-	-	-	100	20	-	**120**
HANA Certified Migration Specialist	Niranjan Cheluri	-	-	-	-	108	20	-	**128**
ABAP Lead	Prasad Chilamkurthi	-	-	-	-	56	40	-	**96**
SAP Technical Infrastructure Consultant #1	Sathish Kumar Arram	-	-	-	-	80	40	-	**120**
ABAP Consultant#1	Rajinikanth Gangishetty	-	-	-	-	56	40	-	**96**
SAP HCM	Jitendra Jilka	-	-	-	-	80	40	-	**120**
SAP Financials (FI/FM/CO)	Subhani Peta	-	-	-	-	80	40	-	**120**
SAP Logistics (MM/PM/Fleet)	Jithender Reddy Battula	-	-	-	-	80	40	-	**120**
DFA SAP AASIS SME #2	Chetan Anguralia	-	-	-	-	120	-	-	**120**
ABAP Consultant #2	Kumar Seemakurti	-	-	-	-	120	-	-	**120**
SAP BW Consultant	Farhan K Bhaba	-	-	-	-	120	-	-	**120**
	Subtotal Milestone #3	**-**	**-**	**-**	**-**	**1,040**	**296**	**-**	**1,336**
Completion of Post Go-live Support									
Program Manager	Karl Foss	-	-	-	-	8	24	-	**32**
Project Manager	John Atkinson	-	-	-	-	20	120	20	**160**
HANA Certified Migration Specialist	Niranjan Cheluri	-	-	-	-	20	112	16	**148**
ABAP Lead	Prasad Chilamkurthi	-	-	-	-	-	72	16	**88**
SAP Technical Infrastructure Consultant #1	Sathish Kumar Arram	-	-	-	-	-	120	40	**160**
ABAP Consultant#1	Rajinikanth Gangishetty	-	-	-	-	-	56	8	**64**
SAP HCM	Jitendra Jilka	-	-	-	-	-	56	8	**64**
SAP Financials (FI/FM/CO)	Subhani Peta	-	-	-	-	-	56	8	**64**
SAP Logistics (MM/PM/Fleet)	Jithender Reddy Battula	-	-	-	-	-	56	8	**64**
DFA SAP AASIS SME #2	Chetan Anguralia	-	-	-	-	40	120	-	**160**
ABAP Consultant #2	Kumar Seemakurti	-	-	-	-	-	-	-	**-**
SAP BW Consultant	Farhan K Bhaba	-	-	-	-	40	120	-	**160**
	Subtotal Milestone #4	**-**	**-**	**-**	**-**	**128**	**912**	**124**	**1,164**
	Total Milestones #1-4	**1,200**	**1,600**	**1,416**	**1,504**	**1,728**	**1,208**	**124**	**8,780**

Proposed Staffing Plan – State DFA Team

Successful SAP implementation projects are a joint commitment by both the client and the integrator. Having a fully integrated team on the technical and functional roles for both Team YASH and DFA will be key to the success of this project. This commitment will ensure adequate knowledge transfer through each phase of the project. Further, with a migration project it is imperative to have the right level of functional participation to test and validate the solution throughout the migration. The estimated effort for DFA roles is included in the exhibit below.

Details for the roles and responsibilities for both Team YASH and DFA are outlined in Section 4.

DFA PLANNED STAFFING PLAN								
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	
Project Preparation Sandbox Installation/Completion	**Milestone #1**								
Development/QA Completion	**Milestone #2**								
Completion of UAT and Go-live	**Milestone #3**						BW4H	SoH	
Completion of Post Go-live Support	**Milestone #4**								
ROLE		**Month 1**	**Month 2**	**Month 3**	**Month 4**	**Month 5**	**Month 6**	**Month 7**	**Total**
Project Preparation Sandbox Installation/Completion									
Steering Committee	Key Stakeholders	16	16						**32**
Project Manager	Stephanie Mains	80	70						**150**
Technical Team Lead	Amber Rust	160	140						**300**
SAP Basis/NetWeaver/HANA	Richard Griese	80	60						**140**
Business Intelligence	Darlene Loftis	80	60						**140**
Business Intelligence	Patric Thumma	80	80						**160**
Security	Randy Kastner	20	20						**40**
Development	Ashok Nelluru	40	80						**120**
Development	Jan Gaddam	40	80						**120**
Business/Functional Team Lead	Michael Palmer	80	60						**140**
Finance - G/L, Finance, Funds Management, SPL	TBD - FI #1	20	30						**50**
Finance - Asset Accounting, Cash Management	TBD - FI #2		30						**30**
Finance - Controlling/Cost Accounting	TBD - FI #3		30						**30**
HCM - OM/PA	TBD - HCM #1	20	30						**50**
HCM - Benefits	TBD - HCM #2		30						**30**
HCM - Time/Leave/Payroll	TBD - HCM #3		30						**30**
HCM - EASE	TBD - HCM #4		30						**30**
HCM - Learning Solution (LSO)	TBD - HCM #5		30						**30**
Logistics - Purchasing/Inventory (MM)	TBD - LOG #1	20	30						**50**
Logistics - Plant Maintenance (PM)	TBD - LOG #2		30						**30**
Logistics - Fleet Managmeent for State Police	TBD - LOG #3		30						**30**
	Subtotal Milestone #1	**736**	**996**	**-**	**-**	**-**	**-**	**-**	**1,732**
Development/QA Completion									
Steering Committee	Key Stakeholders			16	16				**32**
Project Manager	Stephanie Mains		10	80	80				**170**
Technical Team Lead	Amber Rust		20	160	160				**340**
SAP Basis/NetWeaver/HANA	Richard Griese		20	80	80	160			**340**
Business Intelligence	Darlene Loftis		20	80	80	160			**340**
Business Intelligence	Patric Thumma		20	80	80	80			**260**
Security	Randy Kastner		20	40	40	20			**120**
Development	Ashok Nelluru		40	80	80	40			**240**
Development	Jan Gaddam		40	80	80	40			**240**
Business/Functional Team Lead	Michael Palmer		20	80	80	80			**260**
Finance - G/L, Finance, Funds Management, SPL	TBD - FI #1			40	72	60			**172**
Finance - Asset Accounting, Cash Management	TBD - FI #2			40	72	60			**172**
Finance - Controlling/Cost Accounting	TBD - FI #3			40	72	60			**172**
HCM - OM/PA	TBD - HCM #1			40	72	60			**172**
HCM - Benefits	TBD - HCM #2			40	72	60			**172**
HCM - Time/Leave/Payroll	TBD - HCM #3			40	72	60			**172**
HCM - EASE	TBD - HCM #4			40	72	60			**172**
HCM - Learning Solution (LSO)	TBD - HCM #5			40	72	60			**172**
Logistics - Purchasing/Inventory (MM)	TBD - LOG #1			40	72	60			**172**
Logistics - Plant Maintenance (PM)	TBD - LOG #2			40	72	60			**172**
Logistics - Fleet Managmeent for State Police	TBD - LOG #3			40	72	60			**172**
	Subtotal Milestone #2	**-**	**210**	**1,216**	**1,568**	**1,240**	**-**	**-**	**4,234**

DFA PLANNED STAFFING PLAN									
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	
Project Preparation Sandbox Installation/Completion	**Milestone #1**								
Development/QA Completion	**Milestone #2**								
Completion of UAT and Go-live	**Milestone #3**						BW4H	SoH	
Completion of Post Go-live Support	**Milestone #4**								
ROLE		**Month 1**	**Month 2**	**Month 3**	**Month 4**	**Month 5**	**Month 6**	**Month 7**	**Total**
Completion of UAT and Go-live									
Steering Committee	Key Stakeholders					16	16		**32**
Project Manager	Stephanie Mains					80	80		**160**
Technical Team Lead	Amber Rust					160	160		**320**
SAP Basis/NetWeaver/HANA	Richard Griese					160	160		**320**
Business Intelligence	Darlene Loftis					160	160		**320**
Business Intelligence	Patric Thumma					80	80		**160**
Security	Randy Kastner					20	20		**40**
Development	Ashok Nelluru					40	80		**120**
Development	Jan Gaddam					40	80		**120**
Business/Functional Team Lead	Michael Palmer					80	80		**160**
Finance - G/L, Finance, Funds Management, SPL	TBD - FI #1					60	40		**100**
Finance - Asset Accounting, Cash Management	TBD - FI #2					60	40		**100**
Finance - Controlling/Cost Accounting	TBD - FI #3					60	40		**100**
HCM - OM/PA	TBD - HCM #1					60	40		**100**
HCM - Benefits	TBD - HCM #2					60	40		**100**
HCM - Time/Leave/Payroll	TBD - HCM #3					60	40		**100**
HCM - EASE	TBD - HCM #4					60	40		**100**
HCM - Learning Solution (LSO)	TBD - HCM #5					60	40		**100**
Logistics - Purchasing/Inventory (MM)	TBD - LOG #1					60	40		**100**
Logistics - Plant Maintenance (PM)	TBD - LOG #2					60	40		**100**
Logistics - Fleet Managmeent for State Police	TBD - LOG #3					60	40		**100**
	Subtotal Milestone #3	**-**	**-**	**-**	**-**	**1,496**	**1,356**	**-**	**2,852**
Completion of Post Go-live Support									
Steering Committee	Key Stakeholders							16	**16**
Project Manager	Stephanie Mains							80	**80**
Technical Team Lead	Amber Rust							160	**160**
SAP Basis/NetWeaver/HANA	Richard Griese							160	**160**
Business Intelligence	Darlene Loftis							160	**160**
Business Intelligence	Patric Thumma							160	**160**
Security	Randy Kastner							80	**80**
Development	Ashok Nelluru							160	**160**
Development	Jan Gaddam							160	**160**
Business/Functional Team Lead	Michael Palmer							80	**80**
Finance - G/L, Finance, Funds Management, SPL	TBD - FI #1							40	**40**
Finance - Asset Accounting, Cash Management	TBD - FI #2							40	**40**
Finance - Controlling/Cost Accounting	TBD - FI #3							40	**40**
HCM - OM/PA	TBD - HCM #1							40	**40**
HCM - Benefits	TBD - HCM #2							40	**40**
HCM - Time/Leave/Payroll	TBD - HCM #3							40	**40**
HCM - EASE	TBD - HCM #4							40	**40**
HCM - Learning Solution (LSO)	TBD - HCM #5							40	**40**
Logistics - Purchasing/Inventory (MM)	TBD - LOG #1							40	**40**
Logistics - Plant Maintenance (PM)	TBD - LOG #2							40	**40**
Logistics - Fleet Managmeent for State Police	TBD - LOG #3							40	**40**
	Subtotal Milestone #4	**-**	**-**	**-**	**-**	**-**	**-**	**1,656**	**1,656**
	Total Milestones #1-4	**736**	**1,206**	**1,216**	**1,568**	**2,736**	**1,356**	**1,656**	**10,474**

Figure: State of Arkansas DFA Planned Staffing Plan

2.0 Prospective Contractor Key Personnel

The Prospective Contractor should identify Key Personnel for the Engagement, as described in the RFP, including:

- Name
- Position in Prospective Contractor organization
- Proposed role on Engagement
- Focus of work effort
- % of time for that work effort
- Experience in the proposed role
- Qualifications for the proposed role
- Role in the last three (3) projects:

Instructions: Complete the following Table detailing the Key Personnel identified for this Engagement. Add rows as necessary. Do not change any of the completed cells. Any changes to the completed cells could lead to the disqualification of the Proposal.

Team YASH has made a special effort to put together a team of consultants that have also had the opportunity to work with one another in the past. We feel that this added component will bring synergy and efficiency to our team and ultimately result in the timely delivery of a quality solution. Please refer to Table 1 – Prospective Contractor Key Personnel for more information on this incredible team.

Table 1. Prospective Contractor Key Personnel

NAME	POSITION IN ORGANIZATION	PROPOSED ROLE ON ENGAGEMENT	FOCUS OF WORK EFFORT	% OF TIME FOR THAT WORK EFFORT	EXPERIENCE IN PROPOSED ROLE (YEARS)	QUALIFICATIONS FOR PROPOSED ROLE	ROLE IN LAST 3 PROJECTS
John Atkinson	Delivery Manager	Project Manager	Delivery Management and Project Management	100%	13+ years	• PMP Certified by PMI • 5+year of experiences in handling SAP S/4 HANA Projects	• Project Manager – SAP ECC 6.0 to HANA Migration for electronics company • Project Manager - S/4 HANA 1610 Migration for CPG customer • Project Manager for SAP ECC 6.0 to SAP HANA for Power Utility company • Delivery Manager and Program Management for US based clients
Sathish Kumar Arram	Lead HANA Consultant	Technical Infrastructure Consultant	Updating SAP HANA Appliance, SAP ECC 6.0 system to HANA migration with DMO	100%	14 years	• SAP Certified Support Associate - SAP HANA (C_HANASUP_1) • SAP Certified Support Consultant on mySAP All-in-One (C_PXSUP_90) • HANA Migration specialist	• SAP BASIS SME / Technical Lead - SAP LANDSCAPE (ECC 6.0, SCM & BW 7.3) HANA upgrade Migration • Migration Specialist: Oracle to HANA Migration & BW Upgrade • Migration SME: SQL server to HANA and On-premise to Cloud Migration • BASIS Consultant: EHP Upgrade & DB2 to HANA Migration

2.1 Subcontractor Key Personnel

The Prospective Contractor should identify the Subcontractor Key Personnel for the Engagement including:

- Name
- Position in subcontractor organization
- Proposed role on Engagement
- Focus of work effort
- % of time for that work effort
- Experience in the proposed role
- Qualifications for the proposed role
- Role in the last three (3) projects

This section should also detail the past work each listed person has had with the Prospective Contractor or their staff.

Instructions: Provide a listing of the Subcontractor Key Personnel. This Table should be replicated for each Subcontractor used. Add rows as necessary. Do not change any of the completed cells. Any changes to the completed cells could lead to the disqualification of the Proposal.

Team YASH is proud to present our Key Personnel from our teaming partners. They represent significant experience with SAP HANA projects and migrations as well as SAP ABAP development.

Detailed resumes can be found in Section 3 for Key Personnel.

Table 2. Subcontractor Key Personnel

NAME	POSITION IN ORGANIZATION	PROPOSED ROLE ON ENGAGEMENT	FOCUS OF WORK EFFORT	% OF TIME FOR THAT WORK EFFORT	EXPERIENCE IN PROPOSED ROLE (YEARS)	QUALIFICATIONS FOR PROPOSED ROLE	ROLE IN LAST 3 PROJECTS
Niranjan Cheluri	Senior Consultant	SAP HANA Migration Specialist	Updating SAP HANA Appliance, SAP ECC 6.0 system to HANA migration with DMO	100%	11 years	• SAP Certified Technology Specialist - SAP HANA Installation (E_HANAINS151) • SAP Basis and 4 years as SAP HANA Consultant	• SAP Basis Consultant (Data Center Migration - Unify SAP NAM migration to Perlach DC, Germany) • SAP Basis HANA Consultant (SAP HANA 1.0 SPS12, DT, DLM, BW/BPC, ERP 6.0 EhP5) • SAP HANA Enterprise Consultant (SAP HANA 1.0-2.0 SPS02, S/4HANA 1709)
Prasad Chilamkurthi	Senior Consultant	SAP ABAP Consultant	Code Remediation Activities for Unicode Conversion and migration to HANA	100%	13 years	• SAP HANA Certified Application Associate	• 13 years of SAP ABAP experience • ABAP experience covering CRM, Webdynpro, HANA, BI, BW BPC, Enterprise Portal, and Business Objects • Strong experience in designing and developing solutions for Interfaces and Workflow and BADIs and BAPIs

3.0 Resumes

The Prospective Contractor should attach professional resumes of all proposed Key Personnel to this section of the Proposal.

Each resume should demonstrate experience germane to the position proposed. The resume should include work on projects cited under the Prospective Contractor's corporate experience, and the specific functions performed on such projects.

Additionally, for technical staff, each resume should provide information that each proposed key personnel is SAP HANA certified.

Instructions: Provide a resume for each proposed Key Personnel.

John Atkinson
Project Manager

PROFESSIONAL SUMMARY:

A highly successful Program Manager/Delivery Executive with a demonstrable track record of taking control of programs and working with C-Level executives to produce quality results quicker. Earned the reputation as a project recovery specialist. Also leveraged the experience to improve the methods used for estimating and bidding on future initiatives.

Experience of working in many countries and across a wide range of industries, including Aerospace and Defense, Automotive, Oil and Gas, Consumer Products, Process and Pharmaceutical, and brings a great deal of credibility when working with leadership.

KEY STRENGTHS INCLUDE

- SAP Project Lifecycle Management
- Management Consultative Services
- Team Leadership
- Quality Assurance
- Strategic Planning
- Training & Development
- Client Relationship Management
- Business Development
- Organizational Development
- Change Control
- Process Improvements
- SAP Best Practices Implementation
- Risk Management
- Regulatory Compliance
- PMO
- COE Establishment
- SAP SD
- SAP WM

EDUCATION

B.A. Hons., Economics University of Lancaster, England
PMP Project Management Institute Certification, September 2005
British Citizen with US Permanent Resident Status

PROFESSIONAL EXPERIENCE

YASH Technologies, Inc. **Jan 2018-Present**

Responsible for Program Management, Delivery Management, and Project Management for US based clients at YASH. Job profile as Delivery includes.

- Oversight of all aspects of the project life cycle to facilitate successful delivery of the project
- Support the YASH sales team in pre-sales activities, from RFQ to Statement of Work.
- Establish detailed project plans and metrics, work plans, schedules, resource plans and status reports. Identity project risks/gaps and create risk mitigation plans.
- Assemble cross-functional integration teams and assign individual responsibilities. Provide project leadership, work direction and feedback
- Communicate and report status to executives, global business partners and all other key stakeholders
- Develop consulting proposals for clients including project approach, timeline, deliverables, and service billings
- Oversee Delivery activities to confirm that staffing and staff hours related to revenue targets are achieved
- Build strong working relationships with Customers, Partners, Sales, and Solution Development teams

John Atkinson
Project Manager

- Manage the transition of new projects from Pre-Sales to Delivery including facilitation of staff selection and introduction of the consulting team to the pre-sales team and the client
- Provide subject matter expertise in solutions and the use of the right technology to meet customer requirements
- Work with delivery team to ensure that customer's goals and objectives are met during deployment leading to high levels of customer satisfaction
- Assist Solution team to evaluate new solution packages, specifically identifying potential opportunity, business value and technology fit

Projects at YASH:

Client: Lonza Inc. Allendale, NJ *February 2018 – On-going*
Delivery Manager

- Part-time oversight of a project manager and team for a template roll-out in CA to a recently acquired warehouse. The project has a tight schedule to meet the terms of a separation agreement and is on track to be successful.

SAP AMERICA, INC, Downers Grove, IL **2004 – 2017**
Delivery Executive 2013
Delivery Manager 2011
Program Manager 2004

Held roles of increasing and varied responsibility in program delivery on both local and global projects. Managed large and small teams with varying levels of remote and off-shore resources across more than 20 engagements.

As Program Manager, managed multiple project teams and became a specialist in program recovery with notable successes. As Delivery Manager, provided support and guidance to project managers as well as performing "pre-sales" work estimating and presenting statements of work. As Delivery Executive, provided support to customer executives and became trusted advisor as they progressed through their SAP roadmap.

Selected Projects and Engagements:

- Planned and guided the upgrade to SAP GRC 10.1 (Governance and Risk Compliance) for a regulated Pharmaceutical company, ensuring the project met regulatory standards.
- Provided guidance for the migration from SAP ECC to HANA for an Electronics company. The project was completed on-time successfully and the team came in 35% under budget.
- Provided remote oversight for a migration to S/4 HANA 16.10 at a Consumer Products customer. This was the first 16.10 project for SAP in the Midwest.
- Planned and led migration from ECC to HANA for a Power Utility. This project was successful despite a very aggressive timeline and limited customer resources to support it.
- Led the implementation of a pilot project for a cloud-based HANA S&OP (Sales and Operations Planning) at a Chemicals industry customer. This was the customer's first HANA cloud venture and is being rolled-out globally.

John Atkinson
Project Manager

- Provided Delivery Executive (DE) guidance to the leadership team at a Chemicals company migrating from SAP R/2 to ECC. This involved overseeing to two major go-lives involving more than 20,000 users in total.
- Provided DE oversight for a global template roll-out at an Aviation customer in Brazil requiring close coordination between the leadership team in the US and on-site visits.
- Replaced the out-going DE at a large Beverage/Snacks customer, focusing on defining the test strategy for extremely high transaction volumes.
- Successfully recovered a failing Smart-Ops Inventory Optimization pilot project for a Consumer Products customer without adding resources or impacting scope and timeline. The customer achieved huge inventory saving in Year 1 and went on to roll-out to other divisions.
- Re-planned a global template roll-out for an Energy sector acquisition in Australia. Coordinating the UK HQ, the Australian project team and resources in the Far East I lead the team to an on-time go-live, the first in the customer's history, which was 10% under budget.
- At a major Aerospace and Defense customer, re-planned and lead the recovery of a merger implementation that had missed several major milestones after the replacement of more than ten PMO personnel. The project was successful and the customer met strict SEC-imposed deadlines and became a reference customer for SAP.

Niranjan Cheluri
HANA Certified Migration Consultant

PROFESSIONAL SUMMARY

- Over 11 Years of IT experience as SAP Basis and 4 years as SAP HANA Consultant with core strength in all aspects of SAP systems including full life cycle Implementations, Upgrades, Maintenance, and Production Support Projects.
- Extensive experience in Installations, Upgrades, Migrations, Configuration, Administration, Troubleshooting and Production Support of various SAP Applications portfolio including mySAP ERP, SCM, CRM, SRM, Solution Manager, NetWeaver, EP, BI, PI/PO, SAP HANA, S/4HANA, BW, GRC, SBOP BI, DS, DQM, APO, MDM, TREX, TPM, MDG, EWM, BPC, SAP ITS on various platform's.
- Research and provide SAP architecture and implementation strategy in sync with SAP release roadmaps that delivers an efficient and effective platform consistent with SAP best practices and scalable to growing business demands.
- Provide support to multiple SAP landscapes to include ABAP, Java and dual stack systems utilizing standardized operating practices to perform system refreshes, client copies, performance monitoring tuning, OSS note application, backup and restore of SAP database systems, application proof of concept, capacity planning and capacity management.
- Monitor, analyze, identify, and respond to trends in system performance and resource utilization with SAP technology stack, work with the required teams to identify database hardware and network failure scenarios, determine root cause and assist in resolution of issues discovered.
- Prepared Stable solution for SAP HANA Backup Recovery, implemented System Replication and Storage Replication and worked on SAP HANA Tenant DB, Scale Out and High Availability Scenarios.
- SME in E2E Solution Manager Diagnostics (SMD), System Monitoring, System Administration, LMDB, Maintenance Planner, and Change Request Management Configuration's using SAP Solution Manager.
- Ability to work on activities involved in Plan areas (Sizing, Scoping, Client/Landscape Strategy, HANA High Availability/HANA Disaster Recovery Strategy etc.) of Implementation projects.
- Collaborate across IT groups including with DBA, datacenter, system administration, network, functional, development and security teams to assist in driving solutions in Support of all SAP technical operation strategy.
- Define, create, review, update and maintain standard operational procedure documentation relating to SAP application support processes.
- Participate in change control meetings, monthly maintenance meetings and rotational on call support.

SKILL SET

SAP Technology: SAP R/3, ERP, CRM, SCM, SRM, MDM, EWM, BPC, MDG, BW/BI, EP, XI/PI, BOBJ, SBOP DQM, SBOP DS, SBOP IS, GRC, Solution Manager, WAS, Enhancement Packages.
Databases: Oracle, HANA, MS SQL Server, MaxDB, DB2 UDB, DB6.
Business Intelligence: BOBJ, IPS, Data Services, Information Steward, Central Configuration Manager, Management Console, Server Manager, Repository Manager, Life Cycle Management, Address Directories.
Operating Systems: Solaris, RHEL, SLES, HP-UX, AIX, Linux, Windows.

Niranjan Cheluri
HANA Certified Migration Consultant

Programming: C, C++, COBOL, JAVA, VB.
High Availability: PRIMECLUSTER, MS CLUSTER, Oracle Data Guard.
OS/DB Migration: HP-UX, SUN, AIX, SLES, Windows, Linux, Oracle, MS SQL.
Web Applications: Tomcat, Web Application Servers, Web Intelligence, JBoss, NetWeaver Application Server, WebSphere, WebLogic.
Tools: SUM, SWPM, Quick Sizer, HDBLCM, HWCCT, DMO, HANA Studio, DLM, HANA Cockpit, DATA Guard Broker, Data Federation, WDeploy, CCM, CMS, Upgrade Management, Report Conversion, MIGMON, DISTMON, MIGCHECK, Visual Composer, JSPM, Visual Administrator, ConfigTool, ARIS, BMC APPSight, Wily Introscope, HP QC, Redwood Cronacle, and BR*Tools.

EDUCATION
Master of Science, Computer Science

CERTIFICATIONS
SAP Certified Technology Specialist - SAP HANA Installation (E_HANAINS151)
SAP Certified Technology Associate-NetWeaver
SAP Certified Solution Consultant - SAP Solution Manager 7.0 Implementation Tools

TRAINING
System Administration with SAP NetWeaver 7.0
End-to-End Root Cause Analysis
End-to-End Change Control Management

ACCOMPLISHMENTS
Run SAP Boot Camp by SAP America

PROFESSIONAL EXPERIENCE
Unify, Irving, Texas **12/2017 – Current**
SAP Basis Consultant
Environment: ECC, PI, Solution Manager, Oracle, SUSE, Solaris, Vertex, eVision.
Project: DataCenter Migration - Unify SAP NAM migration to Perlach DC, Germany.
Responsibilities:

- Assessing the current environment, and participating in discussions with all the stake holders to plan for a successful migration.
- Responsible for FMO Platform design, and designing Architecture for the migration of SAP systems.
- Designed a SAP application migration approach, and fallback strategy for all the DEV, QA and PRD systems.
- Used Solution Manager for E2E migration.
- Proactively supporting all the SAP Applications, and Troubleshooting and resolution of the issues meeting the SLA`s.

Niranjan Cheluri
HANA Certified Migration Consultant

Bloomin' Brands, Inc., Tampa, Florida **10/2017 – 12/2017**
SAP Basis HANA Consultant
Environment: SAP HANA 1.0 SPS12, DT, DLM, BW/BPC, ERP 6.0 EhP5, SLT, SUSE 11, Solution Manager 7.1.
Project: Dynamic Tiering Implementation and SLT. Use Case – SAP HANA Data Provisioning with Dynamic Tiering. To optimize the main memory resource management in SAP HANA by using extended tables to reduce data volume within their BW/HANA Database to improve performance and maximize the value of their existing infrastructure.
Responsibilities:

- Planned and executed the implementation of SAP HANA Dynamic Tiering on a scale-out BW-BPC Landscape.
- Implemented the best practices covering sizing, configuration, performance, and troubleshooting aspects of SAP HANA system with dynamic tiering and SLT.
- Installed and configured SLT 2.0 with source as ERP and target as BW with BPC running on HANA 1.0 SPS12 and configured SLT System Monitoring within Solution Manager.
- Responsible for carrying out the SLT Initial Load, monitoring, and troubleshooting the replications issues for all the Tables which are in scope for offloading the data to DT.
- Installed and configured DLM (Data Lifecycle Manager) tool to automate the process by modeling the aging rules on tables to displace aged data to dynamic tiering, and scheduling DLM profiles for continuous displacement of aged data.
- Configured Solution Manager for monitoring and alerting relevant to DT and SLT.
- Successfully resolved the issues (DLM relocation errors, Restore failures with DT, eslogs disk space full events, Replications issues with Blank data, null fields etc.). My continuous troubleshooting helped SAP Development team to update their Knowledge Base for SAP customer's reference.

Sabre, Southlake, Texas **05/2017 – 10/2017**
SAP HANA Enterprise Consultant
Environment: SAP HANA 1.0-2.0 SPS02, S/4HANA 1709, Solution Manager 7.2 SPS03, SDI, DLM, DP, SLT, XSA, Dynamic Tiering, Hadoop, AZURE, Fiori, AWS, RHEL 7.X
Project: JEDI – Migration of Sabre`s Airbilling Scorpion database to HANA Enterprise in AWS Cloud with SDI, DLM and XSA. Responsible for hosting the applications on AWS Cloud and stabilizing the development environment, and supporting and resolving the ongoing development and implementation issues.
Responsibilities:

- Delivered Architecture design of the Landscape including the sizing, and hosting all the systems on AWS cloud.
- Responsible for Troubleshooting, Performance tuning, stabilizing, and supporting the ongoing Development to expedite the development and facilitate an enhanced environment to work with.
- Installed and Configured, Test and Production S/4HANA instances with Production configured with HA using HSR across AWS availability zones to facilitate the smooth recoverability in case of Disaster.
- Configured SLT 2.0 to facilitate the migration of data from source systems to HANA, Performance tuning and optimizing the replication settings and resolving the issues during replication process.

- Implemented Dynamic Tiering to facilitate offloading the HOT data to WARM using extended storage with DLM.
- Performed E2E S/4HANA Upgrade from 1610 to 1709 involving the SI checks to identify the Simplification items relevant for the upgrade, and custom code check against the SAP S/4HANA simplification list and post upgrade activities.
- Performed the HANA single system to MDC system as part of HANA upgrade from 1.0 SPS12 to 2.0 SPS01.
- Developed and deployed Best practices for HANA covering Upgrades and Updates, Backups and Recoveries, Failover and Fallback, Zero-Downtime for planned maintenance, monitoring and Documentation.
- Installed, Configured, and supported Fiori, XS Advanced Applications including WebIDE for developing APPS to consume Sabre Airbilling financial reports using Fiori.
- Performed the needed changes in Solution Manager to include the New Systems for all the features like Administration, Monitoring, Alerting and Change Management.
- Involved in cut-over activities and planning for Go-live.

Unify, Irving, Texas **02/2010 – 05/2017**
SAP Basis HANA Administrator
Environment: SAP ERP 6.0 EhP8, SAP ERP 6.0 on HANA, SAP BW 7.4 on HANA, DLM, Dynamic Tiering, SCM 7.x, CRM 7.x, PI 7.1, BW 7.3, DS 4.2, EWM 9.3, Solution manager 7.2, EP, Fiori, Personas, Wily Introscope, Vertex, eVision, Solaris, SLES, Windows Server, Oracle 11g/10g, SQL Server 2010/2012.
Project: ATOS IT Solutions (Formerly Siemens IT Solutions) dedicated onsite SAP Basis Lead, working as single-point-of contact for all SAP services. Worked on major projects such as HANA Implementations, Enhancement package installations, Upgrades, HA/ DR setup, and Brazil Business Operations migration to NAM.
Responsibilities:

- Performed the installation of HANA as part of SAP BW 7.3 migration to BW 7.4 on HANA and SAP ERP 6.0 EhP6 migration to ERP 6.0 EhP6 on HANA in Scale-up and Scale-out environments with HA and DR setups using system replication, as part of TDI team.
- Performed the E2E migration of SAP BW 7.3 (Solaris, Oracle 11.3) to SAP BW 7.4 on HANA (SUSE 11, HANA) using SUM DMO option, starting from sizing, after go-live support and product life cycle management in scale-out environment for PRD with 3 worker and 1 standby nodes along with DR setup using system replication.
- Carried out E2E migration of SAP ERP 6.0 EhP6 (Solaris, Oracle 11.3) to SAP ERP 6.0 EhP6 on HANA (SUSE 11, HANA) using SUM DMO option in scale-up environment for PRD with 3 nodes (Primary, Secondary and DR) using system replication with sync in mem and log shipping.
- Implemented best practices for Patching, Upgrades, Backup and Recovery, HA and DR with Near Zero Downtimes for all planned and unplanned downtimes throughout the HANA product life cycle.
- Performed the Installation, Migration, and Upgrade of the existing SAP systems to facilitate the Brazil migration by building NFE Landscape on NetWeaver 7.0EhP2, configuring Solution Manager 7.1, Updating PI 7.1 to SP16 and integrating NFE Core application, PI and ERP systems for Inbound and Outbound communications.
- Configured the Fiori Scenarios for Transactional apps, Analytical apps, and Fact sheets.

- Solution Manager release upgrade to 7.2 and Configured system for EarlyWatch Alert, CTS+, SMD, Technical Monitoring, Business Process Monitoring, Service Availability, and Job Management.
- Prepared a migration project plan, scaled, and proposed the Landscape per the Target hardware and performed the migration of an existing SAP Landscape on Windows/ SQL Server 2008 to a virtualized Solaris 10/ Oracle 10.2 environment as part of Brazil BO migration to NAM.
- Planned and executed the Enhancement package installations for SAP ERP 6.0 SR3 to SAP ERP 6.0 EhP6, CRM 7.0 to CRM 7.0 EhP2, and SCM 7.0 to SCM 7.0 EhP3 with neroZero downtimes.
- Performed Oracle Database 11g Release 2 software installations and Upgraded the Oracle Database 10.2.0.4 to 11.2.0.3.
- Migrated the DEV eVision 5.3 Database running on 10.2.0.4 to QAS and installed the new spEDI_map server standards to facilitate the business needs.
- Upgraded the Vertex QSUT 3.3 to 4.0 and updating the tool with Monthly Updates.
- Implemented DR systems in Irving Center for all primary Production systems running in Great Lakes Datacenter using Oracle Data Guard.
- Implemented centralized system monitoring and integrated to SiteScope for P2 ticket generations on all High priority alerts to the concerned Team.
- Interface and maintain Third party technologies such as Vertex, eVision, OpenFT, Business Objects, Redwood CPS, Wily Introscope.
- Carrying all aspects of technical support for all the SAP and Non-SAP systems in the Landscape including Life cycle management, real-time services, Web services, adapter instances, server groups, central and profiler repositories.
- On-call support during system outages and crisis, with focus on immediate resolution and root-cause analysis (RCA).
- Responsible for the technical organization of projects, task planning, resource management and manage the operational projects without impact on business.

Del Monte Foods, Inc., San Francisco, CA **03/2016 – 08/2016**
Senior SAP Basis HANA Consultant
Environment: SAP ECC 6.0, CRM 7.0, SCM 7.0, BI 7.0, EP, Solution manager 7.2, SUSE SLES 12, S/4 HANA, ASE.
Project: Upgrade and Migration of the SAP systems to the latest available versions, Supporting the Cut-over Activities, Performance Tuning and Hyper care support.
Responsibilities:

- Performed the upgrade of the EWM landscape to 9.3 along with SCM and NetWeaver components.
- Carried out planning and performed the migration of Business suites systems from ASE 16 to HANA.
- Performed the Solution Manager upgrade to 7.2 and migrated the required configurations to facilitate Central Monitoring and Diagnostics.
- Successfully analyzed and resolved technical problems during Cut-over and after Go-Live and attained customer success.
- Better tuned the systems to attain the performance to make the SAP system run more reliably and efficiently.

Niranjan Cheluri
HANA Certified Migration Consultant

Platinum Advisors, Manalapan, NJ **01/2009 - Present**
SAP HANA Administrator
Environment: SAP ECC 6.0 EhP7, S/4HANA 1709, SAP NetWeaver 7.5, SCM 7.0 EhP4, EWM 9.5, Solution manager 7.2, Fiori, SUSE SLES 12, MS SQL, Windows.
Project: Focus of this project is to carry out the upgrade of the Solution Manager, SCM EWM, ERP, Implementation & Upgrade of S/4HANA, Migration of SCM DB to HANA and supporting the systems and day to day support.
Responsibilities:

- Performed the conversion of ECC 6.0 to S/4HANA OP 1511 and carried out post install activities including initial setup, Client Setup, Fiori Setup and responsible for managing and maintaining them to run optimally, and carried out the Upgrade to 1610.
- Performed the migration of SAP SCM EhP3 (Windows, MS SQL) to SAP SCM EhP3 on HANA (SLES 12, HDB 1.0) using SUM DMO option in scale-up environment for PRD with 2 nodes (Primary and Secondary) using system replication and one node shared for NON-PRD systems.
- Carried out S/4HANA upgrade from 1610 to 1709.
- Responsible for all Basis activities.

AES, Arlington, Virginia **04/2009 – 01/2010**
SAP Basis Administrator
Environment: SAP R/3 4.6C / 4.7 EE, NetWeaver 7.0, SAP ECC 6.0, CRM 5.0, EP 7.0, BI 7.0, Solution manager EhP1, Wily Introscope, Linux RH 4.7 R4, Windows Server, Oracle.
Project: AES Corporation has multiple system landscapes with various SAP products. Full global implementation of Central Solution Monitoring, E2E SMD and CTS+ with in Solution Manager, and brought in all the monitoring capabilities into WorkCenters. The focus of this project was to maintain the SAP Landscape and to minimize the TCO and Implement proactive actions to prevent possible damage to the systems and hence minimize business impact.
Responsibilities:

- Built the Solution Manager 7.0 Ehp1 for the Global Implementation and performed all the Initial, Basic and Managerial Expert Guided Configuration within Solution Manager for its Functionalities (EWA, Solution Monitoring, System Administration, Diagnostics, and Change Management).
- Provided tangible details for road mapping the implementation of Solution Manager Functionality including time estimates, tasks involved, and resource requirements.
- Implemented the central SLD on Solution Manager and integrated all systems in the landscape to central SLD to ease the product life cycle management.
- Technical core activities including SAP software installation, Upgrades, applying Support Packages, and Installation of add-on software components.
- Performed Kernel upgrades and Support pack stack upgrade for SAP ERP 6.0, EP 7.0 and BI 7.0.
- Developed and Tested Backup Strategy involving daily and weekly backups for recovery and to Minimize System Downtime.
- Migrated the production Jobs from Maestro to SAP Central Process Scheduling 8.0 by Redwood and patching the CPS.
- Mapped Solution Manager Functionality and tactically align it with the company landscape and the program lifecycle.

- Implemented Solution Manager Diagnostics for all the Production and Non-Production Instances.
- Implemented the Central system administration for all the satellite systems with customizations involving system specific transactions to ease the Daily monitoring for administrators with automatic Daily report generation.
- SAP Basis Administration in a proactive and reactive mode to ensure that the systems perform within the terms of their respective service level agreements. Collaborate and coordinate with IT Infrastructure & Operations Team to provide seamless system and network support of SAP solution.

Applied Materials, Santa Clara, California **01/2007 – 03/2009**
SAP Basis Administrator
Environment: SAP R/3 4.6C / 4.7 EE, NetWeaver 7.0, SAP ECC 6.0, CRM 5.0, SCM 5.0, EP 7.0/6.0, PI 7.0, BI 7.0, Solution manager EhP1/7.0, SAP Web Application Server 6.40, ITS 6.x, Wily Introscope, GRC, HP-UX, AIX, Windows Server, Oracle, DB2.
Achievements: Certificate of Achievement - For outstanding performance and lasting contribution in implementing one of the largest SAP deployments in the world. Completed Setting up E2E RCA, CTS+ for ECC 6.0, XI and EP and successfully setup the ChaRM for BT Landscape. Trained more than 150 Consultants and Employees on Solution Manager.
Project: Business Transformation (BT). Applied Materials is the global leader in nanomanufacturing technology solutions. I was involved in the full global implementation of BT (SAP ECC, CRM, SRM, GTS, MII, NetWeaver 2004s, XI, BI, and EP). The project requirement was to setup and configure SAP Solutions for BT Implementation. It involved integration of Solution Manager with satellite systems, ARIS, HP QC and setting up the functionalities like E2E Solution Monitoring, Change Request Management, and Service Desk require to be configured.
Responsibilities:

- Carried out the necessary Project Administration, Business Blueprint and Implementation tasks for BT Global Implementation in Solution Manager.
- Responsible for managing the functional aspects of the SAP Solution Manager toolset, including ARIS, HP Quality Center, to support the global implementation of BT.
- Assist during the developing and setup of the Scenarios and Business Process structure in Business Blueprint also configured the BPM.
- Responsible for setting up the SolMan for the Implementation project as a document repository for configuration related deliverables (including documentation templates).
- Implement & Test Procedures for various maintenance activities like Upgrades, Database copy /refresh, Support pack stacks, Add-ons installations and interfaces
- Configured the E2E Root Cause Analysis and Service Desk within Solution Manager for BT (SAP ECC, NetWeaver 2004s, XI, BI, and EP).
- Provided in detail an implementation strategy for Service Desk and Change Request Management (ChaRM) and configured the approval workflow for change for the BT landscape.
- Used ChaRM to manage changes for an implementation project from the planning phases to the physical deployment of those changes within the BT landscape.
- Monitoring of SAP ABAP and JAVA instances using various monitoring tools CCMS Alert Monitoring, Wily Introscope, NWA, and Visual Administrator.

- Configured Output Devices, Spool Management activities, Authorizations of spool services and troubleshooting.
- Identify, generate material, conduct training sessions, and drive communications to user community.
- Review of Security Policy and procedures of the implementation and ensure that security policies and guidelines are followed on toolset as well as controls and approvals in order to comply with internal audit Sarbanes-Oxley reporting requirements.

Sathish Kumar Arram
Technical Infrastructure Lead

PROFESSIONAL SUMMARY:

- Over 14 years of overall experience with 10+ years of SAP Solution Manager and SAP Basis expertise in Migrations, Upgrades, DB Upgrades [HANA/Oracle/ MSSQL Server], Support, health check study
- **SAP Certified Support Associate - SAP HANA (C_HANASUP_1)**
- **SAP Certified Support Consultant on mySAP All-in-One (C_PXSUP_90)**
- Handling VAR delivered Support for SAP indirect US clientele as a project lead.
- Extensively worked on Solution Manager 7.01 and Solution Manager 7.1 SPS 13 for the below scenarios:
    - Change Request Management(CHARM)
    - IT Service Management [Application incident management]
    - Root Cause Analysis
    - Solution Documentation
        - Technical Landscape Documentation
        - Custom Code Management
        - Business Process Documentation
- Sizing SAP HANA system and SAP System based on RDBMS
- HANA Migration
- S/4 HANA Implementation
- Development of standards and procedures for the HANA database environment
- Consult with system administrator regarding O/S - DBMS requirements
- Monitor HANA Database errors
- SAP HANA administration through SAP HANA DB Studio
- Integrate SAP HANA database with system backup management software
- Good hands on in performing SAP User License Audit for a single system and for Landscapes using SAP License Administration Workbench [LAW] tool.
- Competent in Solution Manager, presentation, configuration and support
- Ability to handle the client delivery functions and competency development. Practice Management skills. High learning curve with the ability to embrace new tools and technologies with ease and to seamlessly integrate skill set into the project management and implementation/VAR delivered support lifecycle
- Resolving operational and technical issues before they get out of control.
- Full project life-cycle experience from quotation right through to implementation.
- Ability to manage people across different geographic locations, and cultures.
- Not afraid to take on responsibility.
- An in-depth understanding of operational policies, processes and methodologies
- Collaborating with colleagues both within, and outside the IT organization.
- Delivering of projects within timescales and budgets.
- Solving complex, inter-related problems at a strategic level.
- Managing several SAP projects concurrently.
- Demonstrated leadership ability to drive projects, resolve issues and meet deadlines, motivated to develop successful solutions
- **Pre-SAP Experience:**
    - Worked with Hewlett-Packard, GSCB as SME for Technical Support

Sathish Kumar Arram
Technical Infrastructure Lead

SAP Assignment Details	Sector	Role	Nature of Assignment
Shurtape	Manufacturing	Migration SME	Oracle to HANA Migration and BW Upgrade
IOWA Fertilizers	Manufacturing	Migration SME	SQL Server to HANA and on-premise to cloud migration
Novacoast	Technology	BASIS Consultant	EHP upgrade and DB2 to HANA migration
Cambrex Corporation	Life Sciences	Solution Manager Consultant	Solution Manager Implementation
High Industries	Infrastructure / Manufacturing	Project Manager	Unicode conversion and EHP upgrade
Community Coffee	Consumer Products and Goods	Project Manager	EHP Upgrade
Redspot Paint & Varnish Co.	Manufacturing	Project Manager	EHP Upgrade
Salus Finance LLC.	Financial Institutions	Sr. BASIS Consultant	HANA Migration
AAA Parking	Facilities & Management Services	Sr. BASIS Consultant	S/4HANA Implementation
Baldwin Foods	Consumer Products & Goods	Team Lead	24x7 AMS support
VAR delivery support	Multiple	Project Lead	
HANA Implementation	Manufacturing	Project Lead	Implementation
Avid Technologies	Digital audio / video technology	BASIS Consultant	AMS support
Kawasaki Rail Car	Manufacturing	Project Lead	BW upgrade
Paragon	Manufacturing	BASIS Consultant	SAP inhouse project support
Live Person	Technology	BASIS Consultant	AMS support
Merrill Lynch	Financial Institution	BASIS Consultant	AMS support
Stanley Works	Manufacturing	BASIS Consultant	Solution Manager implementation
Chemtura Corporation	Chemical	BASIS Consultant	AMS support

Sathish Kumar Arram
Technical Infrastructure Lead

EXPERIENCE SUMMARY

- Working with YASH Technologies, Inc. [USA] as a **SAP BASIS Consultant** from December 2016 to present.
- Worked with YASH Technologies-India as a **Lead Consultant**, SAP BASIS from March 2008 to December 2016
- Worked with Hewlett-Packard, Global Support Center Bangalore as a Technical Support Engineer from October 2006 to February 2008

EDUCATION

S.No.	Qualification	Degree Awarded	Year of pass
1	SSC	SSC	1994
2	Intermediate	Intermediate	1997
3	Graduation	Bachelor of Commerce	2000
4	Post-Graduation	Master of Computer Applications	2004

CERTIFICATIONS

1. **SAP**
   Certification name: SAP Certified Support Associate - SAP HANA
   Certification code: C_HANASUP_1
   Certification ID: 0006677973
   Certification date: December 10, 2014
   Certification name: Support Consultant on mySAP All-In-One
   Certification code: C_PXSUP_90
   Certification ID: 0006677973
   Certification date: September 11, 2009

2. **SAP Trainings Attended**
   TADM70 SAP System: Operating System and Database Migration
   HA250 Migration to SAP HANA using DMO
   HA100E SAP HANA – Introduction
   HA200R SAP HANA – Administration and Operations
   E2E100 Root Cause Analysis for SAP Solution Manager 7.1
   E2E200 Change Control Management Expert - SAP E2E Solution Operations
   SM100 Configuration and Operations for SAP Solution Manager 7.1 SP03
   SM200 SAP Solution Manager Change Request Management and Service Desk

3. **Non-SAP**
   Cisco CCNA certified

Sathish Kumar Arram
Technical Infrastructure Lead

TECHNICAL SKILLS

SAP Releases	SAP R/3 ENTERPRISE 47X110/200, ECC5.0, ECC6.0, SAP Solution Manager 7.0 EhP1 & 7.1, SAP NetWeaver 7.3, 7.4, SAP BPC & SAP S/4HANA
Technical Skills	Operating System: IBM iSeries [OS/400], AIX 5.3, HP-UX, Win 98/2000, 2003 & Windows 2008 R2 Databases: Oracle 9.X/10G/11G, MS-SQL Server 2005 & 2008, MAXDB, DB2 Lagunages: C, C++, Java

PROFESSIONAL EXPERIENCE: SAP

FROM September 2017 TO November 2017

Client Name	IOWA Fertilizers	
Project Name	HANA Migration from On-premise [Netherlands] to AWS Cloud [USA]	
Role	Migration SME	
SAP Environment	Source SAP ERP 6.0 EHP7 Database: MS SQL Server O/S: Windows	Target SAP ERP 6.0 EHP7 Database: SAP HANA 2.0 O/S: Linux

Contributions:

- Planning, installation, and maintenance of HANA DBMS software
- Preoperational Activities
- Export of SAP systems
- Set up Linux OS
- Set up RDP Windows instance
- Migration of ERP and Biller Direct Systems
- SAP HANA Database Administration.
- Administration Using SAP HANA DB Studio
- Monitoring HANA Database errors
- SAP HANA Database performance fine-tuning and Optimization
- SAP HANA Database backup and recovery

FROM June 2017 TO September 2017

Client Name	Shurtape	
Project Name	HANA Migration & BW Upgrade using DMO	
Role	Migration SME	
SAP Environment	Source SAP NetWeaver 7.4 Database: Oracle 11g O/S: Windows	Target SAP NetWeaver 7.5 Database: SAP HANA 2.0 O/S: Linux

Sathish Kumar Arram
Technical Infrastructure Lead

Contributions:

- Install Operating System (SUSE Linux) according to SAP BW on HANA requirements
- Run Hardware Config. Check tool
- Install HANA Database on HANA TDI (Tailored Datacenter Integration) according to SAP BW on HANA requirements
- Pre-BW Upgrade/HANA Database Migration activities
- Migrate BW app servers to WS 2012 R2 if WS 2008 R2
- BW Upgrade and HANA Database migration using SUM DMO (From SAP BW 7.4 SP09 to SAP BW
- 7.5 SP5)
- Post-BW Upgrade/HANA Database Migration activities
- Disaster recovery - Storage replication set up
- SAP Pre- and Post-Go live check - BW on HANA Migration
- Knowledge transfer and documentation

FROM September 2016 TO February 2017

Client Name	Novacoast	
Project Name	HANA Migration	
Role	Basis Consultant	
SAP Environment	Source SAP ERP 6.0 Database: DB2 O/S: Linux	Target SAP ERP 6.0 EHP7 Database: SAP HANA 1.0 O/S: Linux

Contributions:

- Planning, installation, and maintenance of HANA DBMS software
- Preoperational Activities
- EHP Upgrade
- Export of SAP systems
- Set up Linux OS
- Set up RDP Windows instance
- Migration of ERP and Biller Direct Systems
- SAP HANA Database Administration.
- Installation of HANA Studio.
- Installation of HANA Live Content.
- Administration Using SAP HANA DB Studio
- Monitoring HANA Database errors
- Diagnosis of problems and resolution for HANA software
- SAP HANA Database performance fine-tuning and Optimization
- SAP HANA Database backup and recovery

Sathish Kumar Arram
Technical Infrastructure Lead

FROM February 2017 TO September 2017

Client Name	Cambrex Corporation
Project Name	SAP Solution Manager implementation
Role	Solution Manager Consultant
SAP Environment	SAP Solution Manager 7.2

Contributions:

- Installation of SAP Solution Manager
- Configuration of Landscape Database Management system
- Connect & Configure Managed System in SAP Solution Manager
- Configure Wily Introscope
- Configure Root Cause Analysis scenario
- Configure EarlyWatch Alerts
- Technical Monitoring
- Configure Solution Manager for Maintenance Planner

FROM November 2015 TO March 2016

Client Name	AAA Parking [Selig Parking]
Project Name	S/4 HANA Implementation
Role	Sr. Basis Consultant
SAP Environment	SAP ERP 6.0 EHP7 Database: SAP HANA DB O/S: Linux

Contributions:

- Planning, installation, and maintenance of HANA DBMS software
- SAP system installation based on S/4 HANA Database.
- SAP HANA Database Administration.
- Installation of HANA Studio.
- Installation of HANA Live Content.
- Administration Using SAP HANA DB Studio
- Monitoring HANA Database errors
- Diagnosis of problems and resolution for HANA software
- SAP HANA Database performance fine-tuning and Optimization
- SAP HANA Database backup and recovery
- SAP Fiori installation and configuration
- Installation of SAP NetWeaver 7.4 gateway Server on Sybase.
- Configuration of Fiori application as HUB Solution.
- Installation of BSI Tax Factory.
- Configuration of BSI Tax Factory 10.
- Applying TUB's to BSI Tax Factory and troubleshooting.
- SAP System copy and Refresh with SQL & HANA Databases.
- Installation and configuration of BOBJ Edge and DS on Sybase
- Installation and configuration of SAP Enterprise Portal
- SPS Upgrade for ECC System to latest patch level.

Sathish Kumar Arram
Technical Infrastructure Lead

FROM June 2015 TO October 2015

Client Name	SALUS Finance
Project Name	HANA Migration
Role	Sr. Basis Consultant
SAP Environment	SAP ERP 6.0 EHP7 Database: Source: MSSQL Server 2008 Target: SAP HANA 1.0 O/S: Source: MS Windows 2008 Target: Linux

Contributions:

- Preoperational Activities for migration
- Export of SAP systems
- Set up Linux OS
- Set up RDP Windows instance
- Migration of ERP and Biller Direct Systems
- SAP HANA Database Administration.
- Installation of HANA Studio.
- Installation of HANA Live Content.
- Administration Using SAP HANA DB Studio
- Monitoring HANA Database errors
- Diagnosis of problems and resolution for HANA software
- SAP HANA Database performance fine-tuning and Optimization
- SAP HANA Database backup and recovery

FROM February 2014 TO TILL DATE

Client Name	Baldwin Richardson Foods	
Project Name	24 x 7 AMS Support	
Role	Basis Lead	
SAP Environment	SAP Solution Manager 7.1 Database: Oracle 11 O/S: Windows 2008	SAP ERP 6.0 Database: Oracle 10g O/S: Windows 2008

Contributions:

- Performed DB Refresh from Production system to Quality system
- Regular Health check monitoring
- Performed migration of existing systems from SMSY to LMDB
- Performed System preparation, Basic configuration and Managed system configuration
- Performed EWA configuration
- Performed Solution Documentation
- Technical Landscape Documentation
- Custom Code Documentation
- Business Process Documentation
- Ongoing support activities like moving the transports, troubleshooting end user's issues

Sathish Kumar Arram
Technical Infrastructure Lead

FROM August 2013 TO November 2013

Client Name	Avid Technologies Inc.	
Project Name	CHARM Implementation	
Role	Basis Administrator	
SAP Environment	SAP Solution Manager 7.1 Database: Oracle 11 O/S: Windows 2008	SAP ERP 6.0 Database: Oracle 11g O/S: HP-UX

Contributions:

- Performed Solution Manager upgrade from 7.0 to 7.1 SPS8
- Performed migration of existing systems from SMSY to LMDB
- Performed System preparation, Basic configuration and Managed system configuration
- Bringing the managed systems to the required SP level which is compatible to implement CHARM
- Domain linking between Solution Manager and Managed system landscape
- Make the required parameter change in Managed system domain controller
- Configure CHARM [using SOLMAN_SETUP]
- Implement central note
- Standard configuration
- Optional configuration
- Landscape configuration
- Administrative tasks
- UI Configuration

FROM MARCH 2013 to AUGUST 2013

Client Name	Continental Resources, Inc.
Project Name	HANA Implementation & Support
Role	Basis Lead
SAP Environment	ERP powered by HANA 1.0 SP06, BW powered by HANA, SLT

Contributions:

- Planning, installation, and maintenance of HANA DBMS software
- SAP system installation based on HANA Database
- SAP HANA Database Administration
- Administration Using SAP HANA DB Studio
- Monitoring HANA Database errors
- Diagnosis of problems and resolution for HANA software
- Database migration from RDBMS to HANA Database
- SAP HANA Database performance fine-tuning and Optimization
- SAP HANA Database backup and recovery

Sathish Kumar Arram
Technical Infrastructure Lead

FROM OCT 2012 TO TILL DATE

Client Name	Avid Technologies Inc.	
Project Name	AMS Support	
Role	Basis Administrator	
SAP Environment	SAP Solution Manager 7.1 Database: Oracle 11 O/S: Windows 2008 SAP ECC 6.0 Database: Oracle 10g O/S: HP-UX	SAP NetWeaver 2004s Database: Oracle 11g O/S: Windows 2003

Contributions:

- Proactive monitoring of server for 100% availability including app servers
- Daily monitoring of production systems and create tickets, fix issues if any
- Weekly monitoring of testing servers and create tickets, fix issues if any
- Accepting Service/Change Control ticket and providing support accordingly
- Need to archive for particular objects on a regular basis
- Need to configure/adjust CCMS alerts and support the same
- Need to support interfaces pointing to non-SAP servers
- 6 System refresh activities per year
- Perform patch upgrade yearly once
- Upgrade Kernel to Release 720
- EHP upgrade

FROM April 2012 TO October 2012

Client Name	Kawasaki Rail Car Inc.	
Project Name	BW Upgrade	
Organization	YASH Technologies	
Role	Basis Consultant	
SAP Environment	SAP Solution Manager 7.1 Database: Oracle 11 O/S: Windows 2008	SAP BW .35 to SAP BI 7.3 Database: DB400 V6R1 O/S: OS400 (IBM iSeries)

Brief Description of Project:
Kawasaki Rail Car (KRC) is a rail car manufacturer in US and Japan. Kawasaki Rail Car is part of Kawasaki Heavy Industries, Ltd. (KHI), headquartered in Kobe, Japan, and one of the largest companies in the world. Founded in 1878, KHI is a multinational corporation and is listed among the top 100 industrial companies outside the U.S.

Contributions:

- Installation of SAP Solution Manager 7.1
- Configuring both BW Development system and BW Production system in SAP Solution Manager for Maintenance Optimizer scenario
- Downloading the required files along with XML files
- Preparing BW Development system for upgrade

- Initializing the upgrade tool in development system using SAPUP
- Performing the upgrade
- Post upgrade activities
- Performing Authorization Migration from 3.X to 7.3
- Building Java system using NW 7.3
- Configuring Development system with BI-Java system to enable the features of BEx 7.X
- Preparing the BW Production system for upgrade
- Initializing the upgrade tool in production system using SUM 1.0 SP5
- Performing the upgrade
- Post upgrade activities

Prasad Chilamkurthi
ABAP Lead

PROFESSIONAL SUMMARY

- Over 13 years of professional experience in implementation of **SAP ABAP/4, HANA** and client server systems, exposure to **SAP Net weaver – EP** and **Web Dynpro.**
- Types of **SAP projects** worked on include **Implementation, Upgrade, Roll-Out** and **Support Projects.**
- **Responsibilities** include **Senior SAP Consultant**, **Developer**, and **Supervisor.**
- Exposure to best business practices (Manufacturing, Mining, Security, Dairy, Retail and insurance domains)
- Strong understanding of the full life cycle of the implementation from the concept stage to go-live and support activities. Excellent interaction skills, communication and teamwork skills.

SKILL SET

- **Extensive experience in SAP ABAP/4 and CRM** - ALE, IDoc, EDI, BAPI, RFC, BADI (Implicit, Explicit), Adobe Forms, Smart forms, SAP Scripts, Dialog Programming, Enhancements, ALV, Performance tuning, SQL trace, Inbound/Outbound Interfaces, Call Transactions, Session Method, Object Oriented ABAP, CRM Web UI, SAP Console, RF Bar coding, Data migration/conversion and LSMW. Also, good knowledge in Webservices, SOAP, BSP and Workflow.
- **Strong experience in SAP Web Dynpro** - User Interfaces, Using Models with WD Adaptive RFC, Models, Navigation: Inbound, Outbound Plugs and navigation methods, Popup Windows, WD Controllers, WD methods, WD shortcut variables, WD component interface, WD actions and events, Dynamic changes to context and UI Elements and Debugging Web Dynpro applications and Net weaver – XI.
- **Strong experience in SAP HANA** – Core data services(CDS) Views, Fiori, SAP UI5, Odata Service, Data Modeling, Attribute Views, Analytic Views, Graphical Calculation Views, SQL Script Calculation Views, Performance Optimization, Currency Conversion, Variables, Import/Export Models, Delivery Unit, SQL Script, CE Functions, Stored procedures, Column Views, Level based and Parent child hierarchies, Restricted/Calculated Measures, Calculated attributes, Referential/Text/Inner/left outer/Right outer joins and cardinalities, Auto Documentation, Data provisioning, SLT, Flat fie upload to SAP HANA, BODS, Direct Extraction Connection(DXC), Reporting, Microsoft Excel, Web Intelligence, Information Design Tool, SAP Lumira, Crystal reports, Creating Users and Roles, Assign privileges to Users/Roles, SQL statements for User management, Analytic Privileges, Package Privileges, System Privileges, SQL Privileges.
- **Strong experience in SAP BI/BW and BPC** – Custom Extractors, Generic Extractors, Data sources, Info sources, Transfer Rules, Data Transfer Processes (DTPs), Update Rules, Info packages, Info package groups, Info objects, DSO, Info cubes, Process Chains Dimensions, BPC Models, BPC DMP, BEx Queries, Crystal Reports, Variables, Calculated key figures, Restricted Key Figures, Infoset Queries, Workbooks, BEx Analyzer, BEx Browser, Custom ABAP Coding, Start & End routines, System Performance Tuning.
- **Good experience in SAP Enterprise Portals(EP)** - Portal Roles, Folders, Work sets, Pages, iViews, templates, business packages and delta links, User Administration and Authentication, Portal Authorization Concept, Single Sign-On (SSO) with Back-End Systems, Integrating SAP Applications, Solution Management, Secure System

Management, Portal Monitoring, Basic UWL Configuration, Advanced UWL Configuration and Portal Transports.

- **SAP versions worked** → S4 HANA, ECC 6.0, ECC 5.0, 4.7, 4.6C, 4.6B, 4.5B, 3.1H, BI 7.3/7.0, BPC 10.1, CRM 5.0, CRM 3.0
- **SAP Modules worked** → FICO, T&E, SD, MM, WM, PP, PM, HR, APO, AFS, SRM, FSCD and CRM.
- **Java Technologies** → JAVA/J2EE, JDBC, Servlets, JFC/Swing, C++, COBOL, HTML5, Java Script, XML.
- **Databases** → Oracle 9x/8x. MS SQLServer 2000/7.0, ADABAS, MS Access

EDUCATION

Masters in Computer Applications, VTU, India

CERTIFICATIONS

SAP HANA Certified Consultant

PROFESSIONAL EXPERIENCE

NBCUniversal, USA – Englewood cliffs **Aug 2017 – Current**
Implementer: HCL, NBCU
Senior ABAP - HANA Technical Consultant

Business Areas: FICO, SD, MM, PS, WM, BPC, BW and HR
Project Synopsis: NBCUniversal is primarily involved in the media and entertainment industries; among its most significant divisions are NBC, one of the United States' "Big Three" television networks, and the major film studio Universal Studios. Via the Universal Parks & Resorts division, the company is also the third-largest operator of amusement parks in the world. Currently NBCU implementing SAP new dimensional products S4 HANA, BW on HANA, BPC 10.1, Net weaver – EP, Web Dynpro and XI/PI for their business needs.
Responsibilities:
a) Understanding the Functional specifications and estimating development time b) Providing business solutions to the customer/team members c) Participating in review meeting d) Involve on critical development work e) Objects' unit testing, peer reviews f) preparing end user guide g) Assist and coordinate other team members h) Smooth project run.

- Implemented user-exit FEDI0003 in FI, to change the IDoc segment E1IDKU3 runtime values. This enhancement FEDI0003 is invoked by IDoc PEXR2002 and program RFFOEDI1 for International Payment Medium(bank) by EDI.
- Developed an inbound interface program to create PO using BAPI_PO_CREATE1, GR using BAPI_GOODSMVT_CREATE and Batch characteristics using BAPI_OBJCL_CHANGE simultaneously. Also, developed custom transaction to create mass transactions in one go.
- Implemented VOFM routines for different tax calculation based on the Order type and state in SD.
- Implemented a BADI WHTAX_SPLIT_UPDATE to populate withholding tax code. When we try to create an Invoice/ Credit Memo using BAPI_INCOMINGINVOICE_CREATE the Withholding Tax Code is not populating properly. This enhancement technique solves the Withholding tax code issue.

- Develop a new bank Check Form based on standard form F110_PRENUM_CHCK and new driver program based on standard program RFFOUS_C. Finally configure in Payment run transaction F110.
- Profit center and employee dimensions loading in BPC, the development tasks involve SLT replication, HANA calculation views, HANA AMDP class and BADI UJD_ROUTINE implementation.
- Develop an interface program to set the user status BUDG of WBS Elements (Child), when WBS Element (Parent) status is BUDG using standard transaction CJ20N and BAPI_BUS2054_SET_STATUS
- Cost object - Cost center/WBS/Internal order dimension loading in BPC, the development tasks involves SLT replication, HANA calculation views/Table functions, HANA AMDP class and BADI UJD_ROUTINE implementation.
- Developed an outbound IDoc which sends headcount(ADD/DEL/LOA) to the external system. Also, involved in PI mapping.
- Replicate BW hierarchy to the BPC for cost center and profit center dimensions using function module RSNDI_SHIE_STRUCTURE_GET3 and BADI UJD_ROUTINE implementation.
- Headcount data load and universal Orlando cost object load for NBCU in BPC, the development tasks involve SLT replication, HANA calculation views/Table functions, HANA AMDP class and BADI UJ_CUSTOM_LOGIC implementation.
- Developed an inbound interface program to extend the materials from one plant to multiple plants using BAPI BAPI_MATERIAL_SAVEDATA.
- Quarterly data load and Universal Orlando Walk (Add/Del/LOA) calculations in BPC, the development tasks involve SLT replication, read BW DSO's data, HANA calculation views/Table functions, HANA AMDP class and BADI UJ_CUSTOM_LOGIC implementation
- Developed and modified Web Dynpro applications based on client requirement.
- Using LSMW developed conversion programs for Cost Center (KS01) Profit center (KE51), Asset Inter Company transfer(ABT1), Asset create (AS91), Consignment Info record(ME11).
- Involved in SAP Gateway/ODATA, FIORI applications and CDS views creation
- Developed a custom transaction for BOM change Request using workflow, on the successful approval of BOM changes, the changes will be updated in standard SAP tables. Printing of Material components of respective BOM using Adobe form.
- Developed SAP Gateway/ODATA using data model methods DDIC structure/ RFC/BOR interface
- Implemented SAP notes based on business issues in FI, SD and MM areas, it includes understanding the business issue, coordinated with business users, basis team and approaching SAP whenever it is required.

Dairy Farmers of America (DFA), USA – Kansas City **Mar 2013 – Jul 2017**
Implementer: Deloitte, DFA
Senior ABAP - HANA Technical Consultant / Lead
Business Areas: FICO, SD, MM, PS, WM and HR

Project Synopsis: DFA is a leading milk marketing cooperative and dairy food processor. DFA serve nearly 13,000 members through their core business of marketing members' milk, paying them a competitive price and being a leader in the dairy industry. It has 33 plants throughout the

country. In addition to own plants, members' milk gets delivered to various customers and joint venture partners. DFA is a leading manufacturer of cheese and butter, as well as dairy ingredients, and contract manufacturer for consumer products. Currently DFA implementing SAP new dimensional products HANA, Net weaver – EP, Web Dynpro and XI/PI for their business needs.

Work Involved:

- Implemented user exit COPA0002 to update the material master commercial price to COPA value fields when billing document is created.
- In Dispatch module, developed Customer and Hauler weekly/daily publishing ADOBE forms, few forms printing involves with Bar coding labels.
- Implemented a BADI AC_DOCUMENT to Populate Trading partner and Partner profit center on Inter-company AR.
- Developed custom transaction using dialog programming in Dispatch module for Customer and Hauler respectively. It handles the Intermediary stations, Switch customer, Reroute load, Ccode transfer, View manifest, Rejection details, Custom Loads. Features include one/three/seven days view as well as drag and drop features. This development involves with Web Dynpro.
- Implemented a BADI MB_DOCUMENT_BADI to Reval Goods Movement in SD.
- Worked in HANA migration, pre-migration and post migration phases.
- Developed complex SQL scripts and implemented CE functions for HANA Calculation views, Attribute views for the master data, and Analytical views for the transactional data. Also, created Analytical Privileges.
- Involved in ABAP on HANA, SAP UI5 development, Fiori App Implementation, CDS Views Implementation and OData Service Implementation and support.
- Based on client requirement developed HANA Advanced DSO, open ODS and Composite Providers.
- Implemented a BADI BADI_LE_SHIPMENT to over write Tender amount in SD.
- Developed an outbound IDoc which sends the load and timeslot details to the customer/hauler. Also, involved in PI mapping.
- Develop RFC Function Module to interface with XI and ADX to create Invoice in SAP and MM area using BAPI BAPI_INCOMINGINVOICE_CREATE. Also, involves with Webservices.
- Developed list of reports a) Purchase Order Tracking report b) Inventory Evaluation report c) Summarized Inventory report d) Invoice Tracking report
- In Equity module, developed Base capital report letter, Equity base capital calculator, retain payment request using ADOBE forms, few forms printing involves with Bar coding labels.
- Implemented user exit COPA0001 to update to populate Milk marketing COPA Characteristic fields and correct COPA characteristics when invoice created from multiple Sales orders.
- BADI WORKORDER_UPDATE is implemented to cater for Cross plant stock determination and the immediate creation of STO, Goods Posting for the immediate fulfillment process. If the material is warehouse material create Transfer requirement (LB01), Transfer order(LT04) and confirm transfer order(LT12) in MM and WM areas.
- In Equity module, developed Capital retain certificate, Base capital statement, Hauler annual letter using ADOBE forms, few forms printing involves with Bar coding labels.
- Optimize ABAP code using AMDP methods.

- Implemented BADIs CUSTOMER_ADD_DATA_CS and CUSTOMER_ADD_DATA to add Dispatch module screen in Customer Master (XD01).
- Developed an outbound IDoc which sends the manifest details to the external system. Also, involved in PI mapping.
- Used SQL Monitor in HANA test system to tune the top custom SQL statements of the running test cases.
- Used ABAP Test cockpit of general quality assurance after migration to HANA.
- For BI/BW, extensively worked on transformations – Start, End and Field Routines as per business requirement.
- Develop the interface in SAP PI to send the order status from SAP to the Web Sphere system.
- Custom RF transaction developed for goods receipts (MIGO) with ref. to Purchase Order/Process Order/ STO deliveries/ shipment and put away pallets in WM module.
- Implemented user exit SDVFX001 to Pass the custom field Milk marketing manifest number to billing from Delivery in SD.
- Interface development using SAP PI 7.3 for Data replication of material master
- Developed RFC in SAP and used in PI mapping to get the PO details while posting PO Adjustment Idoc.
- For BI/BW, created generic data sources in Dispatch and Equity modules using Table/View, Query and Function Module (RSAX_BIW_GET_DATA_SIMPLE) extraction methods.
- Implemented user exit COPA0002 to update the sales quantity values to COPA value field “Free of Charge goods” for the list of item categories relevant to Free of charge goods.

Savvis, USA - St Louis **Aug 2012 – Feb 2013**
Implementer: Savvis
Senior ABAP Technical Consultant
Business Areas: FICO, SD, MM, PS, HR and CRM
Project Synopsis: Savvis is one of the largest IP network and hosting providers in the world, serving more than 4,000 customers, including 40 percent of the top 100 companies in the Fortune 500. Savvis is a top tier managed service provider and solutions in the areas of hosting, network, security, professional services, cloud computing, business continuity, content management, proximity hosting, and web solutions. Currently Savvis implementing BAU-CFO and FI-AR projects in SAP and implementing SAP new dimensional products Net weaver – EP, Web Dynpro and XI/PI for their business needs.
Work Involved:

- Developed an interface program in Web Dynpro to create GR, and PO transactions.
- Using LSMW with standard input programs RCRAPDX1 and RCRAPDX2. Uploading material master(MM) data using LSMW.
- Enhanced the Project builder (CJ20N) functionality using User Exits i.e. country field validation and Frequency domain fixed value validation in FICO area.
- Implement BADI INVOICE_UPDATE in MM area to validate or perform checks on invoice MIRO before saving.
- Implemented User-Exit VSV00001 to populate Partner Function of Ordering Address and Goods Supplier records in the segment E1WYT3M of IDoc CREMAS05.
- Developed Smart Forms, Birthday letter for Employees and Spouses in HR module.

- Create the Return order in SAP and send the Credit memo to the Warehouse system via SAP PI interface
- Developed an interface to allow an automatic creation of consignment info(ME11) record for new materials in MM area. If info record is already created for material, the net price for the consigned item will be updated accordingly.
- Implemented Implicit enhancement point ze_i1391_zshpmntin_idocstat and user-exit V55K0020 for Idoc SHPMNT05 data to change the status from 51 to 63 for unpacked deliveries in SD.
- Custom RF transaction developed for SAP WM transaction LS03N, LS28 so that the warehouse personnel can know the details of the storage bin and pallets stored in the storage bin.
- Developed a tool in Web Dynpro to track the dispute cases in CRM system.
- Implemented BADI ENH_SPOT_LORD to populate the custom fields from ECC to CRM Web UI
- Interface to Automate Kronos load of employee data so that it can be loaded daily without manual intervention in HR module.
- Implement user-exits RFFOX100, RFFOX101, RFFOX102 and RFFOX105 to develop a NACHA file to Deliver ACH payments for garnishments to Bank. All the exits are invoked by program RFFOUS_T.
- For BI/BW, extensively worked on transformations – Start, End and Field Routines and ABAP routines for the customer exit variables.
- Designed a Workflow template to send the email when a new sales document or purchase order is created /changed in database.
- Enhanced Web UI components, views
- Outbound Interface for Eligibility file for new Travel Agency vendor in HR module.
- Developed RFC in SAP and used in PI mapping to get the PO details while posting PO Adjustment Idoc.
- Enhanced the standard report with custom fields in the G/L Account line item display report FAGL_ACCOUNT_ITEMS_GL and transaction FAGLL03.
- Implemented a BADI FDM_AR_DEF_FIN_COORD to assign Coordinator to Dispute case in SD.
- BADI MRM_HEADER_CHECK to raise a warning message in transaction MIRO when user enters special characters in the Reference Field in MM and FI area.
- Custom RF transaction developed for SAP IM / WM transaction MIGO_GO
- Implemented VOFM routines in SD.
- Developed RFC function module to create PO, Goods Posting and Invoice simultaneously. The RFC function module will create PO using BAPI_PO_CREATE1, goods posting using BAPI_GOODSMVT_CREATE and invoice using BAPI_INCOMINGINVOICE_CREATE to store external system data in SAP R/3 and MM. Also, involves with Webservices.
- Outbound Interface for Patriot Managed Retiree Claims - BCBSIL in HR module.

Prasad Chilamkurthi
ABAP Lead

Brown Shoe, USA - St Louis **April 2012 – August 2012**
Implementer: Brown Shoe
Senior ABAP Technical Consultant

Business Areas: FICO, SD, MM (IS Retail), PS, PM, HR and AFS
Project Synopsis: Brown Shoe Company is a global leader in the footwear industry, with more than 130 years of experience, passion and product innovation. Brown Shoe operate more than 1,300 Famous Footwear and Naturalizer retail stores across the United States, Canada and China. Currently Brown shoe implementing Chino PKMS and Vendor portal phase 2 projects in SAP and implementing SAP new dimensional products Net weaver – EP, Web Dynpro and XI/PI for their business needs.
Work Involved:

- Developed an outbound IDOC to send Demand data from SAP to PKMS. The Idoc segment carries the details of the materials with their number of days of arrival into the warehouse to assist with warehouse slotting. Also, involved in PI mapping.
- Implemented BADI BADI_MATMAS_ALE_IN for Inbound material IDOC /AFS/MATMAS05 to change the weights and measures of material from NWS. Also, involved in PI mapping.
- Developed a program to create Goods receipt Posting using BAPI /AFS/BAPI_GOODSMVT_CREATE to adjust the SAP inventory to match the PKMS inventory quantity.
- Outbound Interface for Tobacco Cessation Interface Specification in HR module.
- Implemented VOFM routines in SD.
- Designed and developed workflow for purchase order approvals.
- Developed an interface program to perform goods receipts for case numbers received for the Purchase Orders in SAP from PKMS system. The program will update inbound deliveries using WS_DELIVERY_UPDATE based on cases received and PGR them or if inbound delivery not found then program will create inbound delivery GN_DELIVERY_CREATE and PGR them.
- Implemented SAP notes (64490 and 942785) to fix the ABAP dump while running transaction KES1 for COPA characteristic values.
- Developed 401K YTD Audit Report in HR module
- Using custom inbound IDOC receive the PKMS Warehouse Inventory data in SAP. Also, involved in PI mapping.
- Developed an interface program in SAP R/3 (ECC 6.0) and FI, to pass the custom fields of AS02, using extension structure BAPI_TE_ANLU. This program uses BAPI_FIXEDASSET_CHANGE to change/set tax status of existing assets in FI area.
- custom RF transaction developed for SAP WM transaction LT01 so the warehouse personnel could move the product from one pallet to other, using RF handheld device.
- Implemented a BADI FDM_AR_DEF_DUE_DATE to determine Default Value for Processing Deadline in SD.
- Developed an outbound IDoc which sends the case #'s and contents for carton labels to the PKMS so they have visibility to the incoming cartons. Also, involved in PI mapping.
- Developed Incentive report in HR module
- Developed Vendor Portal Capacity Management user interface component using ABAP Web Dynpro.
- Spending Authorization user interface component using ABAP Web Dynpro.

Energizer, USA - St Louis **June 2011 – April 2012**
Implementer: Energizer
Senior ABAP Technical Consultant/Lead

Business Areas: FICO, SD, MM, HR and WM
Project Synopsis: The Energizer is an international consumer products firm engaged in the development, manufacturing, and sale of a wide range of products. Major lines include batteries, and personal care products. Energizer is using SAP R/3 in most of its geographical locations to manage and improve their business. Currently Energizer upgrading SAP systems and implementing SAP new dimensional products Net weaver – EP, Web Dynpro and XI for their business needs.
Work Involved:

- Developed an outbound and inbound interface programs to extract General Ledger data from GEMS and WP1 systems, and to create G/L Account posting using BAPI BAPI_ACC_DOCUMENT_POST in Eagle system.
- Implemented Implicit Enhancement Option ZSD_SALES_ORDER_POPULATE in program RV60AFZZ and routine USEREXIT_PRICING_PREPARE_TKOMP to display Sales Order and its item in the COPA Characteristics for Inter Company Billing documents.
- Report to calculate bonus for mine employee hours out of info types IT2001, 2002, 2010 in HR module
- Developed an outbound and inbound interface programs to extract Account Payable data from GEMS and WP1 systems, and to create an Invoice or Credit Memo using BAPI_INCOMINGINVOICE_CREATE in Eagle system.
- Implemented a BADI AC_DOCUMENT to replace DUMMY Profit Center with valid Profit Center from other line item at the time of accounting document creation.
- Developed a report to create P & L statement of accounts based on ranges of cost centers and cost elements linked to lines on the statement.
- This interface extracts the data posted to Balance Sheet accounts by profit center for the periods and fiscal years requested for automatic importing into the Hyperion Financial System.
- Developed SAP Script forms that include Affiliate Payment Form, Wire Transfer Request Form, EDI accompanying sheet Form, and Dunning Form.

Peabody, USA - St Louis **February 2008 – May 2011**
Implementer: Deloitte, Peabody
Senior ABAP Technical Consultant

Business Areas: FICO, SD (IS Retail), MM, PS, HR and PM
Project Synopsis: Peabody Energy is the world's largest coal company and an innovative, growing provider of low-cost energy. Peabody products fuel approximately 10 percent of America's and 2 percent of the world's electricity. This is a prestigious SAP project that focuses on implementing SAP R/3 modules in version ECC6.0. The unique aspect about this project is that it uses SAP new dimensional products Net weaver – EP, Web Dynpro, XI and BI etc. for their business needs.

Prasad Chilamkurthi
ABAP Lead

Work Involved:

- Developed an Exit routine for Substitution in FI and SAP ECC 6.0 to update lives of LOM assets in asset master using worklist transactions AR01 and AR31.
- Developed LMS Account Payable interface in SAP and FI area using BAPI BAPI_ACC_DOCUMENT_POST. This interface also notifies users with PDF attachment email whenever errors occur.
- The purpose of this program is to accept the input file with list of parent WBS elements. For each parent WBS element create a child WBS element using BAPI_BUS2054_CREATE_MULTI. For each created child WBS element set status of parent WBS element using BAPI_BUS2054_SET_STATUS.
- Implemented a BADI SCMG_VALIDATE_C to MEIV Category Validation for dispute case in SD
- Outbound Interface for Tobacco Cessation Interface Specification in HR module.
- This Program is developed to post a negative allocation for Fringe Benefits and Incentives using SAP transaction FB01 i.e. BAPI_ACC_DOCUMENT_POST. This automatic process will replace the manual data extraction, manipulation of data and SAP journal entry upload.
- For BI/BW, created generic data sources using Table/View, Query and Function Module (RSAX_BIW_GET_DATA_SIMPLE) extraction methods.
- Developed Work Order details ADOBE form in PM module
- For BI/BW, enhanced standard extractors using BADI RSU5_SAPI_BADI to populate the custom fields according to business requirement.
- Implemented user exit COPA0003 for COPA Characteristic Entry Modification.
- Implemented Screen Exit AIST0002 to a sub screen to add taxable and non-taxable custom fields for transaction AS01. Also, done configuration by me in FI area.
- For BI/BW, extensively worked on transformations – Start, End and Field Routines and ABAP routines for the customer exit variables.
- Implemented a BADI AC_DOCUMENT to Populate Trading partner and Partner profit center on Inter-company AR.
- To print check/s, develop a new bank check form based on standard SAP Script form F110_PRENUM_CHCK and new driver program based on standard program RFFOUS_C. Finally configure in Payment run transaction F110.
- Developed a program to load Bank master data using BAPI_BANK_CREATE and BAPI_BANK_CHANGE in FI area.
- The purpose of BADI WBS_USER_FIELDS_F4 implementation is to provide F4 help for Project Type field of Project systems(CJ20N) and appropriation request(IMA11).
- Worked on KE30 COPA reports to fetch the profitability based on Product/Customer/Customer group/Division/Sales area.
- Developed a program to do a mass pull of invoices out of open text for auditing purposes using fm BDS_CALL_NAVIGATOR in MM area.
- Developed a report to show Intercompany reconciliation with receivable and payable.
- Developed an inbound interface for Mass Journal Entry upload in FI area using direct input program RFBIBL00
- Developed ADOBE Form, Australia Paystub in HR module.
- Modify standard BTE SAMPLE_PROCESS_00002040 to email or fax payment ACH Electronic Remittance directly to the vendor. Usually vendor's bank receives the remittance details in CTX format however some of the vendors does not subscribe to

receive this information from their bank hence this enhancement is very effective and useful. Also, done standard form changes.

- Using LSMW in FI area load Statistical Key Figure (KK01), Cost center (KS01) and Profit center (KE51) data into sap.
- Modified standard Report Writer Program S_ALR_87013557 to add commitments.
- Property Disposal Smartform that is converted into a PDF form and emailed to initiator and the first level approver. This form is normally created during the Property Disposal Approval Workflow.
- Implemented logic in most of the SD Pricing Formula Routines to resolve quantity rounding issues.
- Using Screen Exit CNEX0007, create a sub screen to add new custom fields for transaction CJ20N in FICO and project systems area.
- Implemented Implicit Enhancement Option ZABAP_E_ROLE_ADMIN_SPOOL_SKIP in program RSSCD100_PFCG to avoid the spool creation when there is no data, that way users do not get spool output as email when there is no data exist.
- Treatment Reconciliation report in SD, the purpose of this report is to display actual treatments applied on ship
- Developed outbound interface in FI area to send the payment information from SAP to LMS.
- Develop new Asset report to track invoices in FI and MM areas.
- Implemented User Exit FYTX0002 in MM area for transaction MIRO to pass additional tax relevant data to Sabrix. This user exit passes data from SAP to Sabrix for tax calculation.

Lenovo, USA – Morrisville **Jun 2007 – January 2008**
Implementer: IBM
ABAP Technical Consultant
Business Areas: SD, FICO, MM and CRM
Project Synopsis: Lenovo is a global leader in the PC market after the acquisition by the Lenovo Group of the IBM Personal Computing Division. Currently Lenovo is implementing SAP new dimensional products like CRM Channel management (CHM), ECC 6.0, Enterprise Portal (EP) for their business needs. All these SAP new dimensional products are implementing for Canada and, subsequent roll-outs for USA and China might start in the coming days.
Work Involved:

- Developed outbound interface program in SAP R/3 (ECC 6.0) and SD area to extract Direct sale data i.e. billing data. The extracted data will be used by the Calidus system
- ALV report to list Asset Data related to leasing. This program explains about assets lease to the Lessee.
- Develop an interface program in FI to change the profit center master data using BAPI BAPI_PROFITCENTER_CHANGE.
- In CRM, implement a BADI definition CMS_BFW_DDH_BADI to determine SD contract based on the legacy contract number.
- Inbound interface program using BAPI BAPI_FIXEDASSET_CREATE1 to place Asset Master Data into SAP FICO system. And, screen exit AIST0002 enhancement to the Asset master transaction.
- In CRM, written a program to extract/download Business Partner master data and BP relationship data.

- Implemented VOFM routines in SD.
- Program to extract indirect sale data i.e. RTCM, Seller DMU and Buyer DMU data from CRM channel management. The SAP data will be used by the Calidus system.
- Developed RFC function module to export email address details of the IT support. The RFC called by the Web Dynpro and finally the data will be shown in the iView of Enterprise Portal. Also, involves with Webservices.
- Developed a simple report to maintain RFC destination entry in the table CMSC_RFC_DES_QUE
- Developed Inbound and Outbound interfaces in SD
- Implemented a BADI definition CMS_BRE_RULE_BADI in CRM to perform Special Bid Claim validations which include End user specific, All or none and Promos.
- Pre- sell-in validations, implement a BADI definition CMS_PRE_SI_BADI in CRM-CHM to remove the unwanted order document type, item category records and change the division for required order records in CRM.
- Developed client specific transaction using Dialog programming for BOM change management, also involved with workflow.
- Enhancing the Sales order IDoc based on the business requirement.

Harley-Davidson, USA – Milwaukee **March 2007 – May 2007**
Implementer: Deloitte
ABAP Technical Consultant
Business Areas: SD, MM, FICO and CRM
Project Synopsis: Harley-Davidson has been producing the world's best motorcycles since 1903. The Company markets a full line of heavyweight motorcycles and offers a complete line of motorcycle parts, accessories, apparel and general merchandise. Harley is implementing SAP CRM and Net weaver – EP, Web Dynpro and XI. These SAP new dimensional products assist Harley and their Dealers to get good business in the competitive market.
Work Involved:

- In CRM, implemented BADI ADDRESS_CHECK to validate the Business partner address. SAP XI sends the BP address to store in CRM box which will be validated first by QS/DS before it stores in CRM System. The stored business partner details will be called by the web Dynpro using RFC function module.
- Using Smart form, developed a form for Live HPTR
- Sales order creation using BAPI BAPI_SALESORDER_CREATEFROMDAT2 in SD area
- Developed an interface in CRM to create territory objects using function module CRM_TERRMAN_TERRITORY_CREATE and, function module CRM_TERRMAN_TERRITORY_UPDATE to update existing territory id with new zip codes for each dealership.
- Created customized tables and table maintenance changes using dialog programming.
- Involved in customizing the standard IDoc CRMXIF_PARTNER_SAVE_M02 which will create and change business partner, activity (BAPI_ACTIVITYCRM_CREATEMULTI) and lead document (BAPI_LEAD_CREATEMULTI) sequentially.
- Developed a mass maintenance of unprocessed consumers interface in CRM. The interface program is developed using function modules BUPA_CENTRAL_CI_CHANGE, BAPI_BUPA_ADDRESS_CHANGE

Prasad Chilamkurthi
ABAP Lead

P & G, USA - CINCINNATI **July 2005 – February 2007**
Implementer: Hewlett-Packard
ABAP, EP and Web Dynpro Technical Consultant, Team Lead
Business Areas: SD, FICO, MM, SRM and CRM
Project Synopsis: The P&G is an international consumer products firm engaged in the development, manufacturing, and sale of a wide range of products. Since P&G having business all over the world, it is using SAP R/3 in most of its geographical locations. Currently P&G implementing SAP new dimensional products Net weaver – EP, Web Dynpro and XI for their business needs.
Work Involved:

- Developed ALE, IDocs, Inbound/Outbound Interface, Enterprise Portal (EP) and Web Dynpro, iView and Smart forms.
- Interfacing with mainframes database ADABAS system to get the vendor/customer data.
- Developed Email Delegation tool for P&G customers using Web Dynpro User Interfaces, Models with WD Adaptive RFC. Using Email Delegation tool if a person is going on leave, he can delegate his work to another person. Also, configured iView in Enterprise Portal (EP). Also, involves with Webservices.
- Create URL iViews to show SAP BW(BI) reports in Enterprise Portal (EP) for Cost forecaster project.

HP Shopping, USA - Houston **February 2005 – July 2005**
Implementer: Hewlett-Packard / ABAP Technical Consultant
Business Areas: SD, FICO, PM, MM and CRM
Work Involved:

- Developed Smart forms, Inbound/Outbound Interface, POCs for Enterprise Portal (EP) and Web Dynpro, IDocs, Email Attachments.

TATA Finance Ltd, INDIA **November 2004 – February 2005**
Implementer: SAP India / ABAP and CRM Technical Consultant
Business Areas: SD, FICO, MM and CRM
Work Involved:

- Developed custom interfaces using RFCs, BAPIs, Custom Transaction, LSMW, Smart forms, enhancements using BADIs and User-exits.

Gillette, USA **September 2004 – November 2004**
Implementer: Patni / ABAP Technical Consultant
Business Areas: SD, FICO, MM
Responsibilities:

- Developed custom interfaces using BAPIs, LSMW, Scripts, Workflow, Dialog programming, enhancements using BADIs and User-exits.

Ministry of Defense, SINGAPORE **December 2003 to July 2004**
Implementer: SCS / ABAP Technical Consultant, Team Lead
Business Areas: SD, FICO, HR, MM and WM

Work Involved:

- Developed custom interfaces using BAPIs, Scripts, reports, IDocs, enhancements using BADIs and User-exits.

TÜV Rheinland, JAPAN **September 2002 – November 2003**
Implementer: SRIT / ABAP Technical Consultant
Business Areas: SD, FICO, HR and MM
Work Involved:

- Developed custom RFCs, ALV Reports, SAP Script, Dialog programming and interfaces.

AT and S, AUSTRIA **December 2001 – August 2002**
Implementer: Bigtec / ABAP Technical Consultant
Business Areas: SD, FICO, MM
Work Involved:

- Developed custom interfaces using BDC, SAP Scripts, reports, IDocs and User-exits.

Non - SAP Experience:
Property Net, SINGAPORE **March 2001 – November 2001**
Implementer: Bigtec / Software Engineer
Responsibilities

- Designed the user interface using JSP, Involved in validations and code review

4.0 Roles and Responsibilities

The Prospective Contractor should describe the roles and responsibilities they feel are needed by each party. The Prospective Contractor should take into account the tentative roles and responsibilities listed in the RFP when responding. Any discrepancies between the two should be discussed and notate why your approach would be more advantageous.

Instructions: Provide a listing of roles and responsibilities for each party.

YASH Roles and Responsibilities

The YASH Project Manager will coordinate the activities of the engagement team and serve as the overall point of contact with DFA Project Manager. This Project Managers will be responsible for maintaining the project plan and will update activities, dependencies and timing as required. YASH will communicate adjustments throughout the project to DFA management. Team YASH also had Karl Foss and Chetan Anguralia to serve as leaders with State of Arkansas experience and a solid understanding of the State's SAP landscape, processes, procedures, and personnel. They will be a great asset in supporting the program as well as facilitating the seamless integration between YASH and DFA.

The roles and responsibilities for Team YASH include the following:

YASH Team Role	Responsibilities
Program Manager	• Lead overall DFA relationship and success of the Implementation • Responsible for the overall quality process, review boards and the quality of the deliverables
Project Manager	• Preparation and maintenance of the project plan, project budget, work plan, and project charter • Set the direction and strategy for each milestones, deliverables and overall Implementation • Aiding to define project deliverables and critical target dates to be reflected in the project plan • Supervision of project activities and production of deliverables • Conduct regular meetings with team leaders and consultants to identify and resolve project issues • Assignment and ongoing management of YASH team project resources • Communication of project status to Steering Committee, project sponsors, and project team • Resolve / escalate project issues • Responsible for overall DFA team satisfaction • Ensures timely completion of milestones deliverables. Participates in all Steering Committee meetings

YASH Team Role	Responsibilities
SAP HANA Certified Migration Specialist	• Responsible for design and architecture of migration solution • Responsible for overall delivery of Unicode conversion and migration from SAP ECC 6.0 EHP7 (SBX, DEV, QA, PRD) system landscape to HANA 2.0 using DMO • Responsible for overall delivery of migration from BW 7.5 to BW/4HANA using DMO • Install HANA Database on HANA TDI (Tailored Datacenter Integration) • Pre-and Post-HANA database migration activities • Knowledge transfer and documentation • Work closely with Project Manager to build work plan, risk matrix • SAP Pre- and Post-Go live check – coordination of all activities

SAP ABAP Development Staff	• Act as a single point of contact from YASH team for all development related activities
	• Analyze custom code quality optimization, process optimization, impact analysis for refining the custom code
	• Functional corrections
	  o Code Inspector variant FUNCTIONAL_DB and FUNCTIONAL_DB_ADDITION
	  o ABAP Test Cockpit. (ATC) can build unit tests and scenario tests
	• Recommended SQL performance optimizations
	  o Runtime Analysis, SQL Trace
	  o SQL Monitor for optimizing SQLs in custom code during the migration to SAP HANA
	• Use code push down techniques of SAP HANA like the CDS and ABAP managed database procedures (AMDP) implemented with the native HANA language SQL script.
	• Document the project deliverables
	• Support all testing activities

SAP BASIS Consultant	• Installation and configuration of HANA 2.0 • Check HANA TDI using HWCCT tool • Migration of ECC and BW systems from DB2 to HANA • HANA backup configurations • Migration of AIX scripts to Linux scripts • Support interface build activities on HANA systems • Prepare knowledge transfer documentation • Provide support to HANA systems during hyper-care phase • Work closely with DFA infrastructure team to carry out migration activities • Support functional, technical teams in all testing activities

YASH Team Role	Responsibilities
BW Consultant	• Responsible for overall BW 7.5 to BW/4HANA migration • Understanding for existing BW functions such as data flows • Plan and execute the project working with the Business, IT and delivery team • Pre-BW Upgrade/HANA Database Migration activities • Content migration from BW 7.5 to BW/4HANA • Support in developing testing plans • Ensure quality of activities and deliverables • End User Training • Document the project deliverables, test scripts
Functional Consultants (Finance, HCM, Logistics)	• Functional Testing of current business process in the migrated SAP HANA systems • Participate in all testing activities • Resolution of defects arising out of testing activities
Security Consultant	• Adopt roles and authorization in the migrated environment • Analysis of authorizations objects and security roles

DFA Team Roles and Responsibilities

The roles and responsibilities of the DFA team members include the following:

DFA Role	Responsibilities	% of Time Commitment
Project Sponsor	• Project owner and support overall project initiative, & act as the final escalation level • Commitment and adoption of overall business transformation using best practices	< 5%
Steering Committee	• The primary responsibilities of the steering committee members are: o Committing the required resources to the project o Monitoring the progress and the organizational impacts of the project o Resolving escalated issues o Generating timely decisions; supporting the project manager to accomplish the project goals • Steering Committee members must have: o An executive-level presence within the organization	5 – 10%

DFA Role	Responsibilities	% of Time Commitment
	o A strong belief in, and support for, SAP as a solution for the organization o Decision-making powers o Strong leadership skills o A proven record of being proactively involved with organizational issues	
Project Manager	• Accountable to project steering committee/sponsor for successful completion of the project • Provide overall project direction and guidance • Recommend resolution of issues which extend beyond the scope of the project in a timely manner • Monitor overall project progress, resources (integrator and software vendor) and budget • Serve as the primary conduit to the Steering Committee and senior management of the project • Empower team leads in accordance with the project timing and requirements • Help establish the overall project vision, charter, scope, goals, and strategic priorities • Develop project master plan, including scope, overall resource planning, and timing • Define project resources for team efforts, milestones, organizational structure, and design of deliverables • Facilitate status review meetings with project team • Work with YASH Project Manager in preparing change management plan	50-75%
Business and IT Team Leads	• Overall direction and drive for the project • Integration across solutions and processes - one solution thinking • Solution completeness - process, data, change, roles, training • Adherence to project objectives, timelines and deliverables • Coordinate cross-team dependencies • Resolve and escalate key decisions and issues • Requirements management and communication	50-75%

DFA Role	Responsibilities	% of Time Commitment
Business Team (HCM, Finance, Logistics)	• Liaise with business counterparts for process requirements and inputs • Hands-on participation in learning, practicing and testing the solution • Ensure completeness of processes - data, change, roles, training • Review and approve the work done by YASH (Specifications, test scenarios, training material etc.)	25 – 40%
Infrastructure and IT security Team	• Setup HANA hardware with various infrastructure components such as OS installation, Storage and Network configuration • Provide required access for the project team • Remote access to SoA network for the project team	30 – 40%
BASIS Team	• Work with YASH BASIS consultant in understanding various phases of migration • Participate in knowledge transfer sessions conducted by YASH BASIS team • Dual landscape setup in SoH migration	75 - 100%
Development Team	• Work closely with ABAP Development consultants for all activities related to code remediation • Support in testing activities along with YASH team	50 – 60%
Security Analyst	• Review changes to roles and profiles • Conduct analysis of authorization objects and security roles • Plan and conduct positive and negative role and authorization testing for migrated environments.	20 – 30%

Template T-5

Required Plans

Response Template

Yash Technologies, Inc.

RFP #: SP-18-0087

Table of Contents

1.0 Implementation Plan

The Prospective Contractor should submit a Work Plan regarding the implementation of all services requested under this RFP. This Work Plan will demonstrate that the Prospective Contractor has a thorough understanding of all activities required. DFA requires that the Prospective Contractor provide a schedule with the shortest duration required to implement the services smoothly and without interruption to business operations.

The Work Plan should show all key elements including details with responsibilities, timelines, durations, milestone dates, deliverables, and Prospective Contractor personnel hours by deliverables, State personnel hours, and all critical dependencies for the milestones and deliverables. The Work Plan may be an attachment to the Vendor's Technical Proposal and tabbed as such in the submission as well as an electronic soft copy (Microsoft Project ® or equivalent and Adobe ® PDF) version in the Prospective Contractor's electronic submission of the Technical Proposal.

All content should be formatted for effective viewing in hard and soft copy.

Instructions: Provide a Work Plan including at least:

- High level Project schedule (Microsoft Project® preferred and Adobe ® PDF) including all deliverables and milestones, and timeline
- A listing of what staff is assigned responsibility for each deliverable within the WBS to the level at which control will be exercised (i.e., DFA, Contractor staff)
- Major milestones and target date(s) for each milestone
- Definition of the review processes for each milestone and deliverable and a description of how the parties will conduct communication and status review

Include or attach associated artifacts such as Gantt charts and flowcharts as appropriate.

Implementation Plan Overview

Instructions: Provide an explanation of your organizations upgrade timeline and the benefits.

A high-level project work plan for the Unicode conversion and the Suite on HANA migration is provided in Section 5.0 "**Suite on HANA Upgrade Project Plan**" and SAP BW4 HANA Migration is also provided in Section 5.0 titled "**BW4HANA Upgrade Project Plan**" which details out project milestones, activities, deliverables, proposed dates and project resources both from YASH and DFA teams involved as part this engagement.

Recommended Approach and Timeline

Our analysis of the State's envisioned HANA Implementation strategy is based on our knowledge of DFA and the as well as our vast experience and knowledge of how to best implement large, complex SAP HANA business transformation projects. We have embedded our best practices into Team YASH's methodology and Implementation Plan to help guide us on how best to approach such multi-dimensional engagements as the AASIS Suite on HANA and BW/4HANA projects.

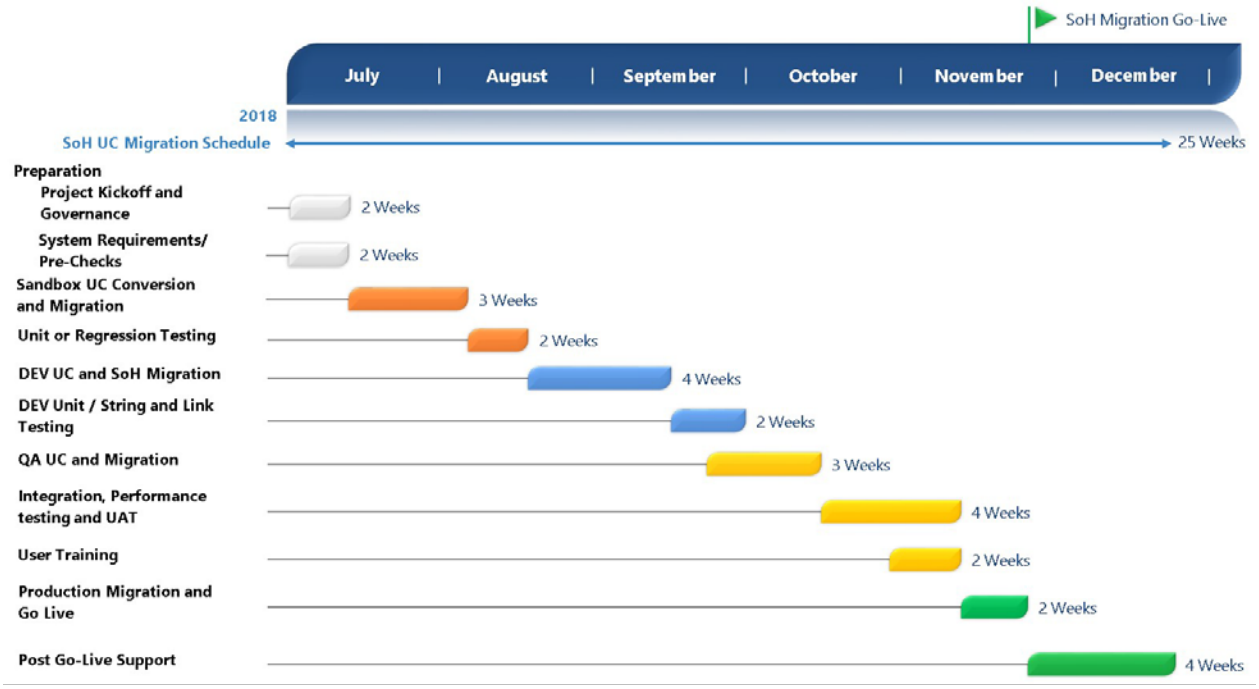
This method, based on experience from many global SAP rollout projects, was developed by our own proposed Key Personnel to provide guidance to our team on how best to implement the HANA database, with the least amount of risk, while preparing DFA to maintain it long after the migrations.

Overall, we agree with the State's milestones and timeframe as outlined in the RFP. We have made some minor modifications that are described in this section of our proposal but delivers the Suite on HANA and BW/4HANA projects within the proposed Go-Live timeframe of November 22nd to 25th.

The timeline provides a balance of risk and reward for the State, allowing for the rollout of HANA in each environment (Sandbox, Development, Quality Assurance, Production) at appropriate times, including thorough testing and involvement of DFA staff for knowledge transfer and UAT and we will collaborate with DFA-OIS to finalize the plan within 30 days of contract award.

Suite on HANA Migration and Unicode Conversion Timeline

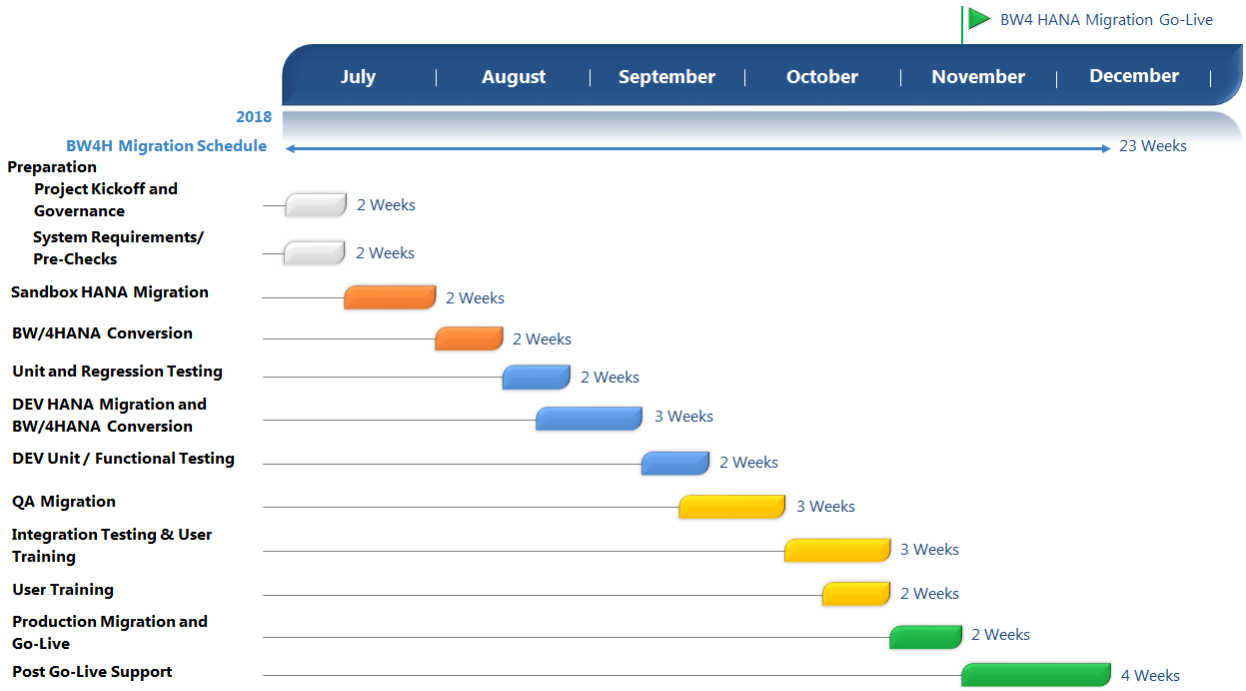
Please find the below, high-level project timeline of 25 weeks (21 weeks of SoH migration and Unicode conversion, 4 weeks of hyper-care support) for SAP ECC 6.0 EHP7 Unicode conversion and upgrade to SAP Suite on HANA. This timeline aligns with the requirements given by the State in the RFP. Furthermore, this proposed timeline aligns with those where YASH has performed similar scope of services.



Suite on HANA Migration and Unicode Conversion High Level Timeline

BW/4HANA In-Place Conversion Timeline

Please find the below high-level project timeline High-level project timeline of 23 weeks (19 weeks of BW/4H Upgrade, 4 weeks of hyper-care support) for SAP BW 7.5 Upgrade to SAP BW/4HANA.



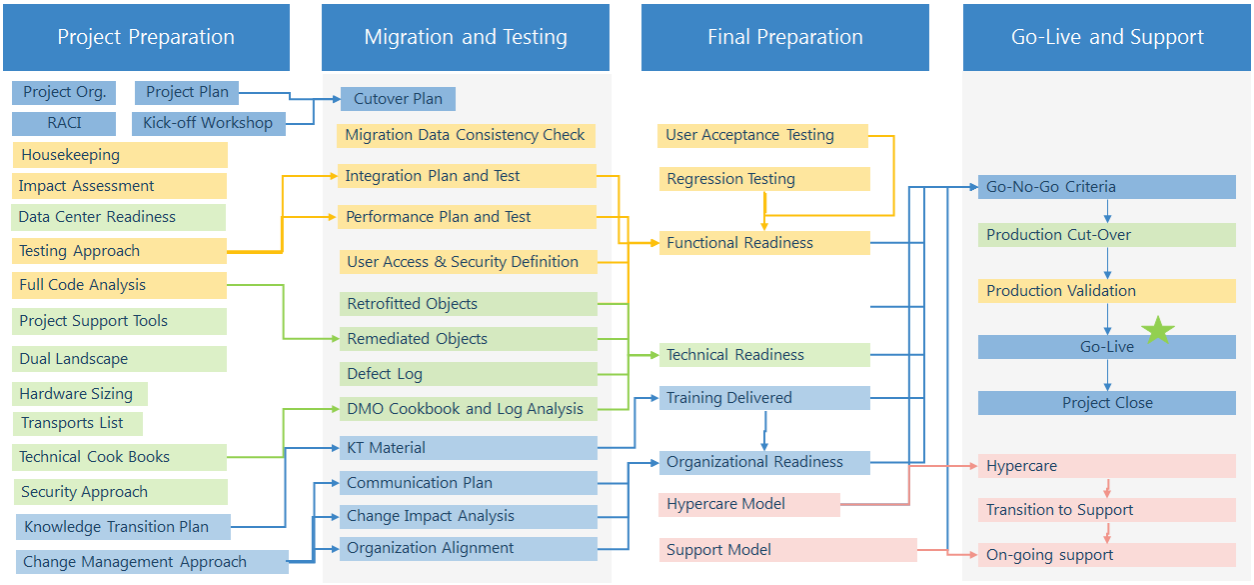
BW/4HANA In-Place Conversion High Level Timeline

Benefits of using YASH solution approach

- Lower risk: First Go-Live with BW/4HANA then Go-Live with SoH approach will reduce the resource bottleneck risk. Should both go-lives occur at the same time, both SOA and YASH resources must work on both Production systems simultaneously. If there is any issue with one Production system, it'll have the impact on timelines of the other Production system.
- Proven methodology approach and advantages
    - DFA resources gain the Knowledge Transfer and Hands-On with the new Database [HANA] before they actually go-live with SoH. This will help in increasing the confidence levels of DFA BASIS Administrators.
    - All available resources can concentrate on one Production system at a time instead of sharing the resources between two Production systems.
    - There are no dependencies on Suite on HANA conversion
    - Users do not need to wait until Suite on HANA upgrade go-live dates for accessing BW/4HANA system and will get access to the BW system after BW/4HANA go-live
- Honed by vast experience in HANA migrations
- Reduced downtime
- Rightsizing of databases, applications and infrastructure
- Database and infrastructure testing and tuning for performance optimization
- Predictable costs for full HANA migration implementation
- Comprehensive migration support for database, application, and infrastructure
- Share best practices, automation tools, and experience from Team YASH

Deliverables and Milestones

The following chart list proposed Project deliverables for this initiative. These are based on our deep experience with HANA migration projects at multiple customers with similar scope of services.



The team would conduct weekly status meetings with the State to track project progression, review issues and risks requiring management attention and review upcoming plans. By collaborating with the State project management team on a regular basis, the entire program would stay informed of project activities. We work collaboratively to proactively mitigate risks and address project issues up front, reducing the risk of unanticipated costs and schedule delays.

Our detailed status reports provide the State with the following details:

- Significant departures from the Project Work Plan with explanations of causes, effects on other areas, and strategies to achieve realignment.
- Changes to project objectives, scope, schedule, or budget.
- Tasks completed since the last report
- Tasks that were delayed, including reason for delay, plan to get back on track, and revised expected completion date
- Planned activities for the next scheduled period.
- Issues requiring management's attention, proposed and actual resolutions, any escalation required, and expected resolution date
- Risks and recommended mitigation plans.
- Upcoming staffing changes (roll-ons and roll-offs)
- Any other topics that require attention from the State Project Manager

The joint State/YASH project team would prepare the following types of status reports:

Individual Status Reports would be created weekly and contain information on ongoing, completed, and outstanding tasks from each team member. The individual status report would outline any tasks that are delayed, the detailed reasons for that delay, and a revised completion date. Every team member submits an individual Status Report to the team lead. Team leads would collect individual Status Reports and produce a team Status Report.

Team Status Reports would be created weekly and contain information on ongoing, completed, and outstanding tasks (providing a reason and refined completion date for any delayed task) for the entire team. The project manager would collect Status Reports from team leads and produce a project Status Report.

Project Status Reports would be created weekly and contain the overall project status and performance based on data from team Status Reports, Issue Log, Risk Log, etc. It summarizes the project's status and provides detailed information for incidents, scope impacts, and deliverables schedules, particularly when executive management attention is needed. The project manager uses the project Status Report to communicate project status and project performance to higher level management and other project stakeholders.

Milestone Review Process

We incorporate and create Milestone Gates at critical junctures of the project to verify that all needed project activities have been completed, and completed to the satisfaction of the client. Activities, documents, deliverables and WBS elements are listed in our methodology and the Milestone Gates provide a checklist of critical and non-critical elements that are to be completed before moving forward to the next phase. Gate reviews can be Green, Yellow or Red. The listed activities before a Milestone Gate can be classified as Yellow, Green or Red. All activities or documents must be completed satisfactorily to get a ranking of green. Yellow raises the risk of the project and warrants caution. However, the team can still proceed to the next phase of the project. Any Red classification informs us that a key activity or document has not been completed to the satisfaction of the client. A Red classification designates an elevated risk to the project. Team YASH recommends that the Milestone Gate be classified as Green before moving to the next phase of the project. If a Milestone Gate is qualified as Yellow or Red, certain joint decisions must be made. The PMO and Steering Team must quantify the risk, provide a rationale for their decision, and decide to move forward or not. The purpose of this deliverable is to:

- Verify deliverables from this phase (or portion of the phase in case of Realization Q-Gates) are complete and accurate and review any critical outstanding issues
- Identify lessons learned during the phase for incorporation into the next phase and/or in preparation for formal project closure.

When Sign Off is obtained, the project can proceed to the next phase of the project with confidence.

2.0 Testing Plan

Instructions: Provide a Testing Plan.

The Testing Plan should demonstrate that the Prospective Contractor has a thorough understanding of all activities required to effectively test.

The testing plan should include the following: Unit Testing, Performance/Volume testing, System Integration Testing (SIT), Facilitation of User Acceptance Testing (UAT)

All content should be formatted for effective viewing.

Include or attach associated artifacts as appropriate.

Mature SAP environments have been in place for 10-15 years or more with many clients. They had a solid test management process when they were implemented but there has been degradation over a period of time, in the quality and structure of test management.

The first step for organizations to get to S/4HANA is the SAP Business Suite on HANA and in the years to come there will be more testing, so a good job of test management is what it really makes sense now. As compared to business process DFA test coverage should be evaluated, ensure where appropriate the modern tools are in place and look at test automation. YASH Technologies and its partners take a comprehensive and holistic approach to test management and choose to focus on Quality Assurance. The following section with introduce YASH's detailed, documented, and proven method for delivering top-quality SAP Hana projects.

Introduction

The purpose of Quality Assurance in the project is to ensure all project deliverables meet the agreed-upon project standards and meet the requirements of the methodology. This is achieved by:

- Clarifying and documenting standards governing deliverables
- Assigning the task to the team member best qualified to create each deliverable
- Informally and formally reviewing the deliverables produced
- Ensuring that the feedback of the users of deliverables is incorporated into a process to improve deliverables.

The main goal of testing is to validate that the system is configured as designed and meets the project requirements. The system functionality requires complete testing from a technical, functional and integration point of view to ensure the following:

- Functions and processes work as defined during the blueprint
- System outputs meet business/user/functional/non-functional/technical requirements in the blueprint
- Completeness and accuracy of data maintained in and output by the system
- User roles and security are set up and defined in accordance with organizational policy
- System throughput and response time is acceptable
- The overall system functionality including the hardware, network and software works in a manner acceptable according to the criteria set up during the blueprint

Furthermore, the quality assurance scope of this project can be split into three primary categories, as follows:

- Functional Testing
- Remediation Testing
- System Testing

For functional testing, we rely upon Unit and Integration testing to ensure the appropriate quality assurance to satisfy business and functional requirements, as discussed in detail in the following sections.

For remediation testing of custom code, we need to use the right tools. This is especially critical when considering SAP HANA migration projects, as Team YASH has experienced in the past few years. We will group remediation testing activities into Development Object (WRICEF object) quality assurance activities for the purpose of this strategy.

Over the last decade within SAP environments, custom code has ballooned rather like test management. Clients with thousands of custom code objects are often seen, and there is no usage of 30-80% of this code.

On HANA, custom code remediation is critical to do, because by default your custom code will not be optimized for the Business Suite on HANA. Severe performance problems and issues with functionality can result. With tools like Custom Code Cockpit (CDMC), Usage & Procedure Logging (UPL) and Clonefinder, SAP Solution Manager is the starting point for this, which help in understanding custom code. Team YASH brings the expertise to identify and remediate impacted database dependent object impacted by the HANA migration.

For system testing, we aim to demonstrate that the whole system (hardware, software, network, etc.) performs according to its specified requirements. This includes performance testing for throughput (volume) and stress (response time). It may also require testing of network response from various points as well as testing of local devices such as printers and faxes, forms, etc.

This section outlines the quality assurance and testing strategy for the State's migration to SAP Suite on Hana and SAP BW for Hana projects. It provides a high-level roadmap of formal quality assurance tasks and phases that the Project Team will conduct in order to validate that the project deliverables and the system solution meets the requirements of the project.

Quality Assurance for Project Deliverables

The project will produce deliverables outlined in the Project Plan. The standards for these deliverables will be defined in the Project Standards document. The responsibility for these deliverables will be detailed in the project plan and the Project RACI document. The following process will be followed for quality assurance for each deliverable:

1. The deliverable will be developed by the appropriate team member Responsible for the deliverable according to the project plan and RACI. The Accountable team member will review the deliverable and provide feedback to improve its quality.
2. On completion of the deliverable, Team Leads (both YASH and State) will review the deliverable and provide feedback to improve its quality.
3. After the review by the Team Leads is complete, the Project Functional and Technical Integration Managers will review it and provide feedback.
4. Where applicable, the business blueprint and functional design documents will also be reviewed by the YASH team leads and / or engagement manager and the State's ERP Manager on an as needed basis.
5. The YASH leads and engagement manager will ensure that cross-team integration points are proactively identified and integrated.
6. Project deliverables build on each other and users of deliverables created in previous stages will report to the Project Manager any feedback they have for improvement.
7. The Project Manager will hold a Lessons Learned meeting at the end of each methodology phase (Blueprint, Baseline Configuration, etc.) to identify ways in which quality may be improved.

System Quality Testing

System Quality Testing consist of different test types each with a different purpose. The test types are described in the table below:

Test Type	Short Description
Unit	Testing of configuration and development component units
Integration	Testing of end-to-end business functions in a process
Security	Security role testing.
Regression	Testing to identify adverse effects of changes
User Acceptance	Testing of end-to-end business functions performed by end users.
Volume/ Stress	System performance and load testing.
Continuity Testing	Backup, restore and failover testing.
System Validation	System build and data validation

Unit Testing

Description

The purpose of unit testing is to demonstrate that a single system transaction or custom program performs as described in its documentation or specification. This testing will be performed in the Sandbox system. In the State of Arkansas Project, all configuration settings and development objects will be unit tested before moving to the quality assurance environment. In unit testing, transactions will be tested to ensure they meet the requirements of a business process and development objects will be tested to ensure they meet the requirements defined in the functional design.

Tools, Environment, and Infrastructure

Environment

The testing is to be performed in the SAP Sandbox environment in the client earmarked for this purpose.

Tools

Tests will be executed manually and no specific testing tools will be used.

Defects will be addressed and retested.

Approach and Procedure

Unit tests must be performed for each transaction in use, Security Role and every object on the WRICEF List. Unit test completion statistics will be tracked by the individual workstreams.

The Unit Tests must be completed before transports are released and migrated to the quality assurance environment.

Roles & Responsibilities

Unit Testing is the responsibility of the YASH consultants, assisted by State of Arkansas to provide realistic test examples and expected outcomes.

The Team Leads are responsible for overseeing the execution of Unit Tests for their respective teams.

Success Criteria

The determination whether a Unit Test Passes or Fails will be made by the consultant and the State of Arkansas team member together, based on the expected result for the test.

Integration Testing

Objective

Integration testing covers the integration between individual transactions, programs, data, external systems and hardware devices and is based on pre-designed test scripts that include test scenarios, test cases, test data and expected results. Integration Test Cycle 1 will be performed using string testing. Test scripts will only be used in Integration Test Cycle 2 and Integration Test Cycle 3.

The testing is performed by teams who have been trained in test execution, documentation of results and reporting and management of defects. Integration testing proceeds in cycles starting with end-to-end process level testing and is increased to encompass all processes, manual, automated and batch, etc., performed during a typical period (day, week, month and year). In subsequent cycles, security, interfaces to external systems and integration with devices such as printers are tested.

Each business process will be tested during integration testing. Later cycles of integration testing involve all system-related activities used to complete a business process, including interfaces, workflow, etc. All infrastructure elements used by the system including network software and other middleware will be tested during integration testing.

The following are goals of integration testing:

- To find errors and to demonstrate that the design functions as it should.
- Verify configuration within each SAP module
- Verify WRICEF objects
- Verify integration of SAP modules
- Validate roles, security and authorizations
- Test operational procedures
- Validate the system infrastructure
- Verify data load integrity

Tools, Environment, and Infrastructure

Environment

Integration testing is conducted in the Development and Quality Assurance environments specifically defined in each test plan, with appropriate configuration, master data, transaction data and change control criteria. *Systems for Integration Testing are defined in the Technical Design and Implementation Plan.*

Tools

Test Scenarios & Test Scripts for will be used for Integration Test Cycle 2 and Integration Test Cycle 3 (Step-by-Step test description are to be provided by State of Arkansas) will be defined during realization.

Defects will be tracked in MS Excel.

Approach and Procedures

Integration testing will be conducted in cycles. There will be three cycles of Integration Testing:

Integration Test 1:

ITC 1 is essentially string testing; stringing together of multiple unit tests inside of one SAP module or process area.

This testing cycle includes all master data configuration and transaction scenarios and development items that are complete in accordance with the project plan.

The testing focus will be on functionality and will be done without any security roles.

No interfaces are tested during this Integration test cycle.

Data used for testing will be generic created data to ensure no confidential data can be viewed during testing.

Integration Test 2:

This testing cycle includes all master data configuration and transaction scenarios and development items that are complete in accordance with the project plan.

The testing focus will be on functionality and limited security roles will be used to execute test cases.

Data will be secured through authorizations that will be used for testing.

A portion of Business Intelligence Reports will be tested in this cycle

Integration Test 3 (Regression Testing):

This testing cycle includes all configuration and development objects plus any remediation items outstanding from Integration cycles 1 & 2.

The testing focus will be on functionality and security roles will be used to execute test cases. This test cycle will not be as extensive as I1 & I2. Focus will be on core transactions and remediation items from I1& I2.

Interfaces will not be tested during this Integration test cycle except for Remediation items.

The data will be secured through authorizations that will be used for testing.

Remaining Business Intelligence reports will be tested in this cycle.

Each integration test cycle will have the following phases:

Planning → Preparation → Execution → Evaluation & Conclusion

The extent to which each phase will be formulated for each test type depends on the complexity and nature of each of the test types.

Planning Phase:

Objective:

- Clear and concise description of expectations, timeline, ownership and environments for testing

Deliverables:

- Test Roles and Responsibilities
- Timeline and Scope of test
- Testing logistics and procedures that will be followed
- Issues tracking defined (classification and resolution procedures)

Preparation Phase:

Objective:

- Ensure that all required components to execute tests are prepared and ready to start testing
- Test participants are trained in test execution and documentation process.
- State of Arkansas and extended team (if involved), understand their roles
- Test scripts and procedures are defined, understood and agreed upon, contingency plans are in place, facilities are available and ready

Deliverables:

- Business Scenarios are identified
- Test scripts and procedures developed and signed off by functional teams and other stakeholders
- Master data is loaded or prepared for loading as part of the testing
- Other test data is described in the test script and prepared as necessary
- Technical considerations (environment, client and access strategy) understood by all participants
- Test participants are prepared to execute tests

Execution Phase:

Objective:

- Execute tests to identify configuration, technical, and process issues
- Document test and report issues
- Resolve issues and test resolutions to issues

Deliverables:

- Completed test results indicating Passing/Failure/Comments
- Test defects logged in the issue log
- Documentation of steps taken to resolve issues
- Summary of test results, outstanding items and reason for outstanding

Evaluate & Conclude:

Objective:

- Evaluate results from tests
- Evaluate impact of outstanding tests and issues
- Provide input for cycle exit decision

Deliverables:

- Summary of test results with impact analysis for outstanding items
- Sign-off on test results by stakeholders
- Recommendation on exit decision based on test results.

Roles & Responsibilities

- STATE Project Team will provide the input for the Test Scenarios, Scripts and Test data.
- Preparation of Test Scenarios and Test Scripts for Integration Test Cycle 1 will be completed by YASH.
- YASH will perform all integration test cycles, document the results and log issues.
- YASH Consultants will provide resolutions and re-test.

Success Criteria

The expected outcome of tests will be defined in the Test Scripts. A test passes if the outcome of the test is the same as the expected result.

User Acceptance Testing

Objective

User Acceptance Testing is a formal integration testing cycle performed to obtain final signoff from key business stakeholders identified in each test plan, that the system meets the requirements.

Tools, Environment, and Infrastructure

Environment

The testing will be performed in the SAP Quality Assurance environment in the client earmarked for this purpose.

Tools

Tests will be executed manually by testers and test scripts developed for integration testing will be used.

Issues will be tracked and monitored (ex. SharePoint or HP Quality Center).

Approach and Procedures

The Integration Test Scenarios form the basis for the User Acceptance tests. Tests will be designed based on integrated processes and executed with the applicable authorization roles.

Roles & Responsibilities

The YASH Consulting Project Team will provide the input for the Test Scenarios, Scripts and Test data.

Preparation of Test Scenarios and Test Scripts will be completed by STATE.

State of Arkansas Project Team and Subject Matter Experts will perform the tests, document the results and log issues.

YASH Consultants will provide resolutions.

State of Arkansas Project Team and Subject Matter Experts will test the resolutions.

Success Criteria

The outcome of the tests will be measured against the expected results as defined in the test scripts to determine whether it is a success or failure. In addition to the results of the integration test scripts, users may consider the results of other types of testing including system testing, parallel testing, security testing etc. before the system is finally accepted.

Security Testing

Objective

Security Testing is conducted to verify that the roles and authorizations incorporated in the SAP system are designed and configured correctly.

Tools, Environment, and Infrastructure

Environment

The testing will be performed in the quality assurance environment as a part of Integration Testing Cycles 2 and 3.

Tools

No special tools will be used. Issues will be tracked in SharePoint.

Approach

Test users will be created and assigned roles designed and configured for each type of user. Testing will be conducted by attempting to perform the duties of the role using standard test scripts (Positive Testing). Tests will also be conducted to perform tasks not-compatible with the role that will be defined separately (Negative Testing).

Roles & Responsibilities

- The YASH Consulting Project Team will provide the input for the Test Scenarios, Scripts and Test data.
- Preparation of Test Scenarios and Test Scripts will be completed by YASH.
- YASH will perform the tests, document the results and log issues.
- YASH Consultants will provide resolutions.
- State of Arkansas Project Team and Subject Matter Experts will test the resolutions.

Success Criteria

The success criteria for positive testing of each role will be defined in the relevant test script. The success criteria for negative testing will be the inability to perform the incompatible task using that user.

Regression Testing

Objective

The purpose of regression testing is to identify any loss of functionality caused by a significant upgrade to source code or configuration. This type of testing is inherent in multiple cycles of testing. In an upgrade project, this type of testing may be performed prior to introduction of new functionality to separate root causes of defects.

Tools, Environment, and Infrastructure

Environment

The testing will be performed in the quality assurance environment as a part of Integration Testing Cycles 2 and 3. In effect User Acceptance testing will be the final regression test cycle.

Tools

No special tools will be used.

Approach

Testing will be conducted by using standard test scripts.

Roles & Responsibilities

- The YASH Consulting Project Team will provide the input for the Test Scenarios, Scripts and Test data.
- Preparation of Test Scenarios and Test Scripts will be completed by YASH.
- YASH will perform the tests, document the results and log issues.
- YASH Consultants will provide resolutions.
- State of Arkansas Project Team and Subject Matter Experts will test the resolutions.

Success Criteria

The success criteria for positive testing of each role will be defined in the relevant test script. The success criteria for negative testing will be the inability to perform the incompatible task using that user.

System Testing

Objective

System Testing is conducted to demonstrate that the whole system (hardware, software, network, etc.) performs according to its specified requirements. This includes performance testing for throughput (volume) and stress (response time). It may also require testing of network response from various points as well as testing of local devices such as printers and faxes, forms, etc. System testing will be conducted by the State of Arkansas. Each type of test is discussed in detail below:

Stress Testing

Stress testing is subjecting a system to an unreasonable load while denying it the resources (e.g., RAM, disc, mips, interrupts, etc.) needed to process that load. The idea is to stress the system to the breaking point in order to find bugs that will make that break potentially harmful. The system is not expected to process the overload without adequate resources, but to behave (e.g., fail) in a safe manner (e.g., not corrupting or losing data). For example, stress testing may be conducted by adding multiple user sessions and dialog tasks.

Volume Testing

Volume testing is subjecting the system to a statistically representative load (e.g. check creation process). The two main reasons for using such loads are in support of software reliability testing and in performance testing. In performance testing, load is varied from a minimum (zero) to the maximum level the system can sustain without running out of resources or having transactions suffer excessive delay.

Continuity Testing

This testing is performed to ensure that the backup and recovery procedures are adequately designed, documented and work effectively without loss of data. Failover testing will also be conducted as part of continuity testing.

The recovery procedure describes the recovery and rollback process, which allows the system to be returned to whatever earlier state is require. Depending on the severity of the problem encountered, it might be necessary to return the production system to a baseline configuration or just roll it back to the state it was in at a particular point in time.

The following elements are critical to the recovery procedures:

A list of scenarios - Analyze the systems involved and identify the situations, or scenarios, under which problems are likely to occur. Determine which systems might be affected and the functional dependencies among them so that there is a clear understanding of the larger impact that a single failure might have. Use these scenarios to create strategies that identify when and how to run backups and the types of recovery for which a plan may be needed.

A definition of acceptable downtime - Define how much downtime if any, the State can accommodate.

A list of critical systems and processes - In the event that a failure does occur, it is necessary to know which systems are the most critical and must be brought back online first. If resources such as bandwidth are limited, it is necessary to know which systems have the highest priority and which should not take up network traffic. When evaluating how critical a system or process is, consider factors such as its effect on human health and safety, the legal liability it exposes, the risk to confidentiality, and the cost of replacement.

A recovery strategy - The recovery strategy defines how to recover data or systems in each of the scenarios that are defined in the recovery plan. This might include restoring data from backups, switching over to redundant systems, rolling back to previous configurations, or other strategies. Include an additional procedure for recovering from severe data corruption. By having a recovery strategy in place, the State can quickly restore the production environment to the required state so that work can continue with minimal interruption.

A rollback strategy - The rollback strategy defines how you plan to use backup and recovery procedures to return the production environment to the state it was in before changes were made. Specify the criteria that a problem should meet to warrant rolling the environment back to its previous state. For example, you might establish a system for classifying the severity of problems and describe which type of response is warranted by certain levels of severity. Also decide whether you need to have different rollback strategies for different types of problems

The roles and responsibilities for team members - Make sure that every task in the plan is assigned to an appropriate team member, and that that person has the information needed to successfully perform required tasks. Consider including training in the plan.

The backup and recovery plan should be reviewed by the project team and by those responsible for potentially affected systems. After the plan has been approved, it should be tested to ensure that the processes put in place work as expected.

Device Testing

This testing is performed to ensure that the additional devices such as printers, scanners, etc. function appropriately and support business processes as needed.

Tools, Environment, and Infrastructure

Environment

The testing is to be performed in the SAP Quality Assurance environment in the client earmarked for this purpose. System testing is generally performed in a production environment specially created for testing purposes without any live data so as to be able to determine production system quality.

Tools

Tests will be executed manually by testers following the test script that are provided by State of Arkansas.

Approach and Procedures

The scope of service will be determined after consultation with State of Arkansas at a later date. This may include:

- Test scripts including processes and user tasks that are resource-intensive for system testing
- Test scripts designed to validate the recovered system for continuity testing
- Device testing will be conducted using the integration testing scenarios that involve the use of each device.

- The test data may be as provided for in the test scripts.
- If additional variation is required in test data, the technical team will work with the process team responsible for the test script to define adequate variations.

Roles & Responsibilities

YASH consultants will support system testing in coordination with State of Arkansas team members who will provide input in the design, preparation and execution of the tests. The overall project team and subject matter experts may be called upon to assist in system testing.

STATE will be responsible for remediation of system defects as identified during system testing.

Success Criteria

The outcome of the tests will be measured against the expected results as defined in the test scripts to determine whether it is a success or failure.

System Validation

Objective

System Validation testing is conducted to ensure that the system is fully functioning before handing it over to end-users to proceed with transaction entries. This is distinct from integration and user acceptance testing which are conducted in the quality assurance environment.

Tools, Environment, and Infrastructure

Environment

This type of testing is conducted in the production environment and client.

Tools

No tools will be used. Tests will be manually executed by power users.

Approach and Procedures

Selected users from the project and key power users in departments will be granted access to the production environment at the appropriate point in the cut-over plan. This will be after system build; conversion activities and post build steps have been completed. The test will be conducted only after the go-live decision has been made,

The users will test key transactions in each area using live data to confirm that the system is performing as expected, authorizations are working as expected and that the system is ready for release to all users.

Roles & Responsibilities

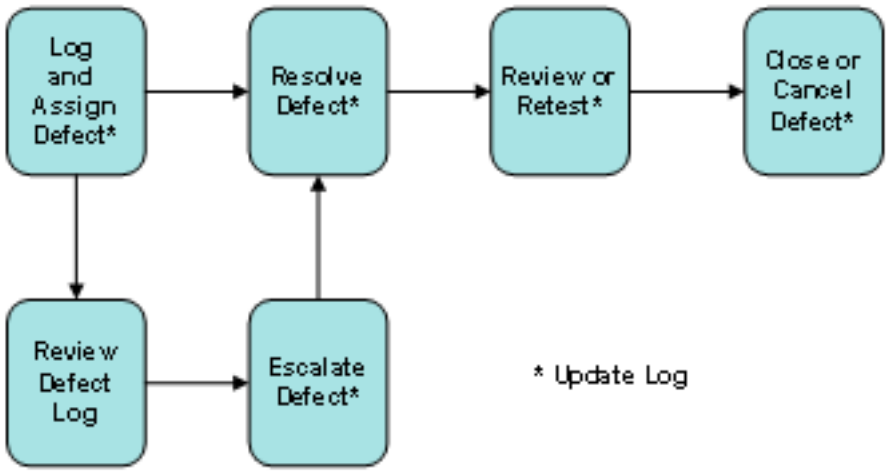
This testing will be conducted by authorized power users under the guidance of members of the State of Arkansas project team. YASH consultants will assist with defect resolution.

Success Criteria

Since live data will be processed, the expected outcome is known by the end-users and should be validated by the project team.

Defect Management

Defect Management is the process of identifying, managing and resolving defects during the execution of a test plan.



Log and Assign Defect

When a testing team member encounters a defect during testing the defect must be recorded via the Solution Manager defect tracking application. All defects must be assigned a status that reflects the stage of processing. The defect status is set to ‘new’ if it hasn’t yet been assigned for correction.

The testing team member assigns the defect to the relevant functional or technical team member. If the testing team member is not clear on who should be assigned the defect, the defect is assigned to the Lead of the team responsible. When the defect is assigned, the defect status is updated to ‘assigned’.

Defects are prioritized based on the testing team member initial assessment of the criticality of the defect, and may only be adjusted by the Lead, a delegate of the Lead or the Project Manager.

Resolve Defect

The functional or technical team member to whom the defect has been assigned picks up defects from the database, according to priority, for research and resolution and changes the defect status to ‘in progress’. Once a resolution is provided the defect status is updated to ‘ready for retest’ and information about the solution is recorded in the ‘resolution description’ field. The defect is assigned back to the testing team member for review or re-testing, depending on the nature of the solution.

Review or Retest Defect

Once a resolution has been provided, the defect can be reviewed or retested. Review or retesting must be performed by the appropriate testing team member. While this is in progress the tester sets the status of the defect to ‘under review’. If the review is satisfactory or the test is successful, then the defect status is updated to ‘resolved’. If the defect has not been resolved, it is again assigned to the functional or technical team member with status ‘assigned’.

Review Defect Log

Review meetings are held to review the defect log. These test review meetings are held at regular intervals and are facilitated by the Project Manager. The Project Manager uses the test review meetings to evaluate the execution of the test plan. During these meetings determinations are made about defect escalation and test plan adjustments. The Project Manager may reassign and reprioritize defects during the review meetings, depending on the information represented by the testing team, the functional or technical teams and other attendees at the review meeting.

Close or Cancel Defect

The review meetings are also used to close defects that are in ‘resolved’ status. Defects can only be closed with the agreement of the Project Manager. Defects may also be cancelled, depending on whether a defect has become irrelevant for whatever reason. A defect can only be cancelled by the Project Manager, the PMO or a delegate of the Project Manager.

Escalate Defect

If a disagreement arises within the testing team about defect resolution or a particular defect becomes problematic to resolve, the Project Manager will escalate it to the PMO during the test review meeting.

Defect Definitions

A defect is any situation identified that prevents the test from being completed, causes the actual results to differ from expected results or the tested functionality to not meet requirements documented in the Blueprint. Defects can affect system functionality or may be errors or missing elements in user procedures. Defects will be allocated a severity and priority. Severity indicates the impact on the user and / or business and Priority indicates the effect on testing. For example:

Severity Definitions

Severity 1 = Functionality is missing or wrong

Severity 2 = Functionality is not completely correct but there is a workaround

Severity 3 = Minor defects that do not affect functionality

Priority Definitions

Priority 1 = no testing can continue on this module until the defect is resolved

Priority 2 = a work around can be applied and testing can continue

Priority 3 = testing can continue unimpeded

Defect Tracking

The defect reporting process will provide for the reporting of the defects in various statuses. It will also provide for reporting of the type of defects and the sources.

The following data will be kept for every logged issue.

Item	Description
Project	Name and identifier of the project
Defect number	Auto-generated, unique issue number
Short description	Short description of issue
Detailed description	Detailed description of issue
Severity	Defines impact of the issue on business

Item	Description
Priority	Defines the impact on testing; used to prioritize work on corrections
Due date	Date by when issue must be resolved
Logged by	Name/ID of person logging the issue
Date logged	Date when issue is originally logged
Test type	Testing activity in which the issue occurred (for example, unit/integration/user acceptance/ regression testing, etc.)
Application area	Application area affected by the issue (e.g., accounts receivable, general ledger, asset management, payroll)
Business process	Business process (or ID) affected by the issue as defined in the test script
Test script	The test script (or ID) with which issue is identified
Transaction code (if applicable)	Specific transaction code where issue occurred
Relevant development object	Technical details of relevant development object
Assigned to	Name of person to whom the issue is assigned
Assigned date	Date when issue is assigned
Status	New, Assigned, Test Error, In Progress, Ready for Retest, Under review, Resolved, Closed, Cancelled, Etc.
Status date	Date on which status is updated
Resolution description	Description of the issue resolution
Resolution impact (if applicable)	Description of impact to business process design, business process procedures, training material etc.
Transport number (if applicable)	Details of the transport that contains the correction
Closed date	Date when issue is closed

3.0 Knowledge Transfer Plan

Instructions: Provide a Knowledge Transfer Plan.

The Knowledge Transfer Plan should demonstrate that the Prospective Contractor has a thorough understanding of all activities required to effectively train staff.

The Knowledge Transfer Plan should show all key elements including details with responsibilities, timelines, staffing, durations, and deliverables.

All content should be formatted for effective viewing.

Include or attach associated artifacts as appropriate.

Knowledge transfer is not a one-time event, but a project management "thread" that runs throughout the project cycle. It requires a strategy and attention to execution. Team YASH and the State project team must be managed with the objective of knowledge transfer in mind from day one. Team YASH's project team knowledge transfer strategy is focused on making the State operationally independent at the end of the Project, and focuses on making the HANA environment maintenance seem simple. Transferring knowledge is second nature to our skilled and experienced consultants.

Team YASH's knowledge transfer uses the following approach**:**

- **Just in time project training**. We provide training for the HANA database, tools, and administration based on when team members are expected to use the knowledge as it applies to current phases. This allows the team to immediately apply the knowledge and retain the information from classes.
- **Integrated project teams**. We propose a highly integrated project team where Team YASH consultants work closely with the DFA Project team throughout all phases to facilitate knowledge transfer. Our initial role is to facilitate and lead discussions while developing these skills in DFA Project team members. The goal is to have DFA team members be proficient as we get to the implementation phase.
- **Use of technology to enable learning**. Team YASH tracks knowledge transfer activities for key project deliverables and management tools. In addition, Team YASH has a comprehensive set of program templates for Knowledge Transfer on SAP engagements, which includes assessment forms and knowledge transfer plans:
    - *Knowledge and skills categories*. The categories of knowledge and skills team members need to acquire so that the knowledge transfer objectives are achieved (that is, system configuration, system testing, change leadership, project management, to name a few).
    - *Knowledge transfer mechanisms*. The mechanisms and channels that will be used to maximize the learning process (such as, attend courses, lead work-sessions, shadow coaches)

- *Tracking process*. The way to track the efficiency and effectiveness of the knowledge transfer process, and make adequate changes and reviews to the overall strategy.

- **Walkthrough**. Team YASH will bring SAP HANA knowledge/business process best practices into work sessions and then promote best practices through migration, testing, cutover, go-live and sustainment. This enables DFA team members and critical SMEs to gain an understanding of the process design and SAP HANA functionality that will be used to maintain AASIS.

To check that knowledge transfer is taking place based on the plan, Team YASH has built milestone delivery checkpoints. An important measure of knowledge management is having DFA team members take a more proactive lead in the Project as we move on to later phases. Another method to confirm knowledge transfer success is to periodically have informal or formal discussions with DFA Project team members related to knowledge transfer activities. Based on the feedback, DFA and Team YASH leadership teams can take corrective actions as necessary.

Knowledge Transfer Activities

During the planning phase, team leads set the criteria for their team members related to knowledge transfer activities. The table below defines certain activities and when these activities should take place during each phase.

Activity	Timing
Team leads establish knowledge transfer criteria for team members	Project start
Team leads review knowledge transfer process and overall criteria with team	Individual team meetings
One-on-one meetings take place with team members to share criteria and complete individual development guides	Project start
Ongoing progress toward targets is informally tracked	As appropriate
Team lead conducts final assessment and reports on achievement	End of project

DFA employees get hands-on experience through all phases of the project lifecycle to understand the HANA migration and implementation phases. DFA employees learn by doing through working side-by-side with Team YASH teammates. We use this approach successfully on hundreds of implementations every year. This approach facilitates knowledge transfer and builds the confidence of the State employees while at the same time, completes critical project work activities. Based on our knowledge of AASIS and the requirements listed in the RFP, Team YASH provides an initial knowledge transfer plan and will work with DFA to finalize session details, dates and participants.

Initial DFA AASIS Suite on HANA Upgrade and BW4HANA Upgrade – Knowledge Transfer Plan

No.	Knowledge Transfer - Activities	Delivery Method	Responsible	From	To
1	**HANA on RHEL - Prerequisites**	Document & KT Session	YASH	Week5	Week5
	OS Kernel SP Level				
	Mount points				
	SWAP Spaces				
	File system types				
2	**Running HWCC Tool**	Document & Hands-On	YASH	Week6	Week6
3	**HANA Installation details**	Document & Hands-On	YASH	Week8	Week8
4	**HANA Cockpit Installation & Administration**	Document & Hands-On	YASH	Week9	Week9
5	**Basic HANA Administration activities**	Document & Hands-On	YASH	Week10	Week10
	HANA Start & Stop - Command				
	HANA Start & Stop - Cockpit				
	HANA DB Backup - Command				
	HANA DB Backup - Cockpit				
	HANA Parameter Tuning				
	Analyzing HANA Logs				
6	**HANA DB Restore Process**	Document	YASH	Week11	Week11
7	**Migration using SUM DMO Processes & Procedure**	Document & Hands-On	YASH	Week12	Week13
8	**Installing Additional Application Servers using SWPM**	Document & KT Session	YASH	Week14	Week15
9	**Post Migration Activities**	Document & KT Session	YASH	Week15	Week16
10	**ABAP Code Remediation Activities**	Document	YASH	Week5	Week6
11	**BW/4HANA Conversion Activities**	Document	YASH	Week8	Week10

Based on the scope of the RFP and knowledge of delta functionality with the HANA database, we will focus of Knowledge Transfer session and activities on:

- How system refreshes and client copies are impacted or changed with HANA
- How support packages are applied and impacted with HANA
- How existing documentation and procedures be updated with the new technical HANA jobs and tasks (e.g. update the Run Book with the step-by-step guide to the HANA migration)
- New technologies the State will need to know – i.e. architectural elements such as the Index Server, XS Server, and Name Server
- Managing the relationship between memory and data-persistent processes, and proper administration of the persistence layer itself (log and data volumes)

- With the new landscape, keeping environments in sync with SAP Landscape Transformation Replication Server (SLT), and SAP Data Services used in different real-time replication, and batch ETL contexts.
- BW/4HANA delta skillsets:
    - Examples include increased data modeling capabilities, and information model consumption.
    - Nearline storage (NLS) interface which provides an alternative to traditional data archiving, and Smart Data Access (SDA)
    - Knowledge of user management and access control (i.e. Developers need direct database access, and an understanding of the change control and transport mechanisms available)
    - Data provisioning technologies for Data Mart systems to get data from external systems into the SAP HANA database

Note: SAP Recommends completing the following courses by the team who would be working on the systems for day to day operations:

1: HA100 - SAP HANA Overview

2: HA200 - SAP HANA Installation & Operations

Measures and Assessments

We measure and assess knowledge transfer progress as part of the overall knowledge transfer plan. We conduct knowledge transfer assessments aimed at measuring the progress of knowledge transfer at periodic intervals throughout the implementation life cycle. Knowledge transfer checkpoints are planned for the following timeframes within the implementation life cycle for each of the project phases.

- Completion of the Project Preparation phase
- Completion of the Migration and Testing phase
- Completion of the Final Preparation phase
- Completion of the Go-Live and Support phase

The following measures will be included:

- Formal and informal feedback consisting of questionnaires, surveys, and team meetings
- DFA team member knowledge transfer assessments conducted by both the Team YASH responsible for transferring knowledge and DFA project team members responsible for gaining the knowledge
- DFA project team members will be targeted and evaluated on two categories:
    - HANA application and project tools
    - Their knowledge and proficiency in the new HANA skills

Levels of Achievement

The levels of achievement are part of the checklist to identify whether the required knowledge has been transferred to the appropriate State personnel. Team members will be targeted in appropriate categories at one of five levels, shown below:

Level	Description
1	Understands basic concepts, able to complete basic tasks with continuous support
2	Understands most concepts, completes tasks with regular support
3	Grasps knowledge, completes tasks with limited support
4	Strong understanding of the area, ability to coach and effectively communicate knowledge to others
5	Subject expert for the organization in this area

Deliverables

The following deliverables would be created as a part of the overall project effort:

- **Knowledge Transfer Plan** - This document details the approach used on the project to transfer knowledge to State employees. It includes the templates, tools, methods, and timeline associated to transfer knowledge.
- **Formal Knowledge Transfer Sign-Offs** - This deliverable serves as formal acknowledgement that the team has fulfilled the goals and objectives set forth in the Knowledge Transfer Plan.

4.0 Go-Live Plan

Instructions: Provide a Go-Live Plan. The Go-Live Plan should demonstrate that the Prospective Contractor has a thorough understanding of all activities required. All content should be formatted for effective viewing. Include or attach associated artifacts as appropriate.

The following section details YASH's approach and strategy for managing Cutover and Go-Live Activities:

Deliverable Name:	**Item Number:**
Cutover Manual including Go-Live Plan	
Deliverable Purpose: The purpose of this deliverable is to plan system cutover activities in the appropriate sequence so that preparatory steps are complete and that the right people are available when required. The cutover plan covers activities for setting up and initializing the production environment. The plan must cover application data (such as master data and transaction data), as well as customizing and repository objects.	
Deliverable Due Date and Frequency of Update (if applicable): W1 - 30 Days of Project Start Prior to UAT Exit	
Deliverable Description: The Cutover Manual deliverable includes preparing a cutover plan to migrate the system and organization to a production system. This plan focuses on the activities, tasks, and timing of the final days of effort. The main benefit is a plan to provide a smooth transition to production. The cutover plan includes a checklist that reviews points of readiness, and provides the basis for approval to progress. The cutover plan schedule and timing must cover the procedures to close legacy systems, if any, and to enter data in the new system. A pause in cutover activities may be necessary to resolve last-minute problems. The written cutover plan must be reviewed and approved by the project manager, core project team leads, and key company senior management. The plan must be presented to the Steering Committee in summary form.	
Deliverable Scope: The Cutover Manual including Cutover Plan deliverable must include: • Maintenance of a pristine client that has the entire configuration, which can be used to prepare QA and production system environments • Data conversion estimates for each object (manual or automated data conversion • Duration of the process	

- Other objects that must be loaded before this object
- Backup before or after this object to help in rollback of a particular load
- Number of parallel sessions to be created to help reduce the load time
- Determination of the application server's load distribution
- Data conversion estimates, the types of data, and how long the process can take
- Timing of when the conversions are performed
- Team leads for the cutover
- Roles and responsibilities of the core project team, power users, end users, and others
- Availability plan for all involved people (including location, telephone numbers, and so on)
- Team assignments and working hours
- Company management involvement and decision-making designates
- Procedures for shutting down legacy systems
- Reconciliation procedures to validate business transactions are cut off in the legacy systems
- Reconciliation procedures to validate data is converted to the new system

The Cutover Manual including Cutover Plan deliverable activities will:

- Create a final checklist. This final checklist reviews points of readiness and provides the signal to progress.
- Create a contingency plan. The cutover plan must include a contingency plan for delays. The contingency plan must address how long (in hours or days) the new production system cutover can progress and be successfully stopped, while allowing the legacy system(s) to be restored. It is standard practice to have a point of no return for making the new system operative. After a few hours or days, it may not be possible to convert the business operations back to the legacy system; however, it is important to consider this option.
- Determine conversion timing and schedule. The timing and schedule of the final data transfer (conversion) will be determined. How long it can take for each type of conversion (master data and transaction data) will be estimated, including executing the data conversion programs and time for manual data conversion. It will be determined when the data must be backed up, who reconciles the data and when, and how much time is required to rerun programs if programs abort.
- Test operation of the new system. The final stage of the conversion process and system readiness check is to test the operation of the production system, validating that transactions are working and that users have appropriate system access. This can be done through display transactions and reports or live transactions. The cutover plan can provide for an initial start-up of the new system before most users sign on; for example, a power user can enter the first transactions to validate that everything is operating as designed.

Sections, Content, or Key Fields:

- Full body of configuration both manual and automatic objects
- Data conversion estimates for each object (manual or automated)
- A strategy to help enable manual data to be entered only once such that it is moved automatically to the rest of the systems
- Duration of the processes
- Other objects that must be loaded before and given object
- Backup procedures to help in rollback of a particular load
- Number of parallel sessions created to help reduce the load time

- Determination of the application server's load distribution
- Data conversion estimates, the types of data, and how long the process can take
- Timing of when the conversions are performed
- Team leads for the cutover
- Roles, responsibilities, and availability plan for the involved staff
- Company management involvement and decision-making designates
- Procedures for escalating issues and performing emergency fixes
- Procedures for ramping down legacy activity
- Reconciliation procedures to verify data is correctly converted to the new system
- Downtime procedures for manual off-system processing
- Contingency plans
- Overall logistics for cutover

A high-level Go-Live plan for Unicode conversion and suite on HANA Upgrade is provided as an attachment titled as "**SOA-UCnHM-Go-Live Plan**" and SAP BW4 HANA Upgrade is provided as an attachment titled as "**SOA-BW4HANA-Go-Live-Plan**" which details out project milestones, activities, deliverables, proposed dates and project resources both from YASH and DFA team's involved as part this engagement. Below is a sample Go-Live plan deliverable.

Purpose

The Cutover Plan identifies the activities to be performed during the cutover process from getting started through execution of all related tasks. The related tasks include 1) planning, 2) acceptance, and 3) execution. The plan further defines the activities required to facilitate a smooth transition into production for additional SAP functionality. Major activities of Cutover are the migration activities and getting the Production SAP system functionally and technically ready.

Goal and Objectives

Goal

The Goal is a plan to ensure a smooth transition to production.

Objectives

Establish the Process for the Actual Go-Live Transition

Define the Approach and Framework for executing the Cutover

Establish Approval Criteria for Formal Cutover Acceptance

Define Project Team Activities, Roles & Responsibilities

Define Organization Team Activities, Roles & Responsibilities

Define Project Management Activities, Roles and Responsibilities

Strategy

For each SAP Project Phase, there will be a separate set of Cutover documents created using the following templates:

Cutover Checklist and the Cutover Task List/Schedule

A Cutover Schedule will be maintained, tracking all key area milestone dates to ensure all areas are coming together for the individual effort. A Cutover Checklist will be created with all necessary detail and dependencies are tested/updated via the cutover simulations and lessons learned process. Lessons Learned from each cutover simulation are to be evaluated and included as updates to the Migration Plan going forward.

Cutover Planning

Cutover Planning and Accelerated SAP Phases

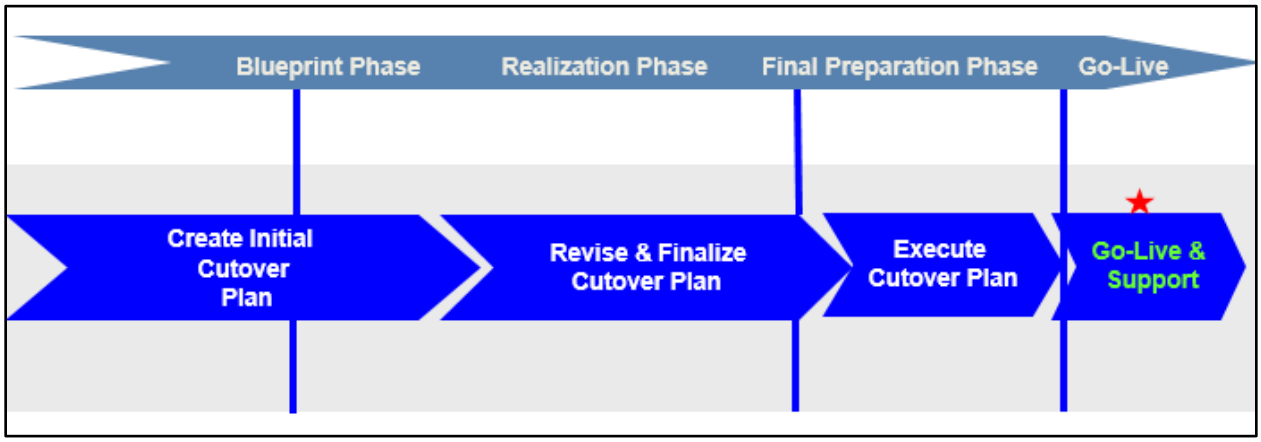


Figure 1 Cutover Planning and Accelerated SAP Phases

Cutover Planning and High-Level Activities

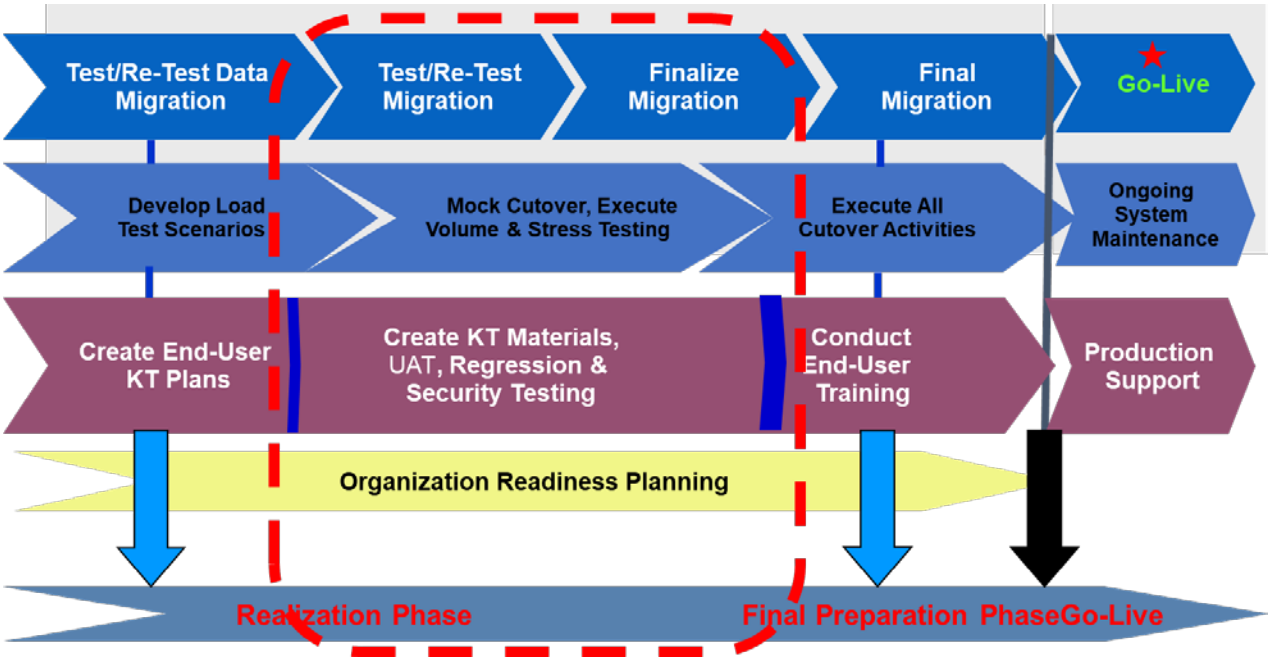


Figure 2 Cutover Planning and High-Level Activities

Cutover Organization

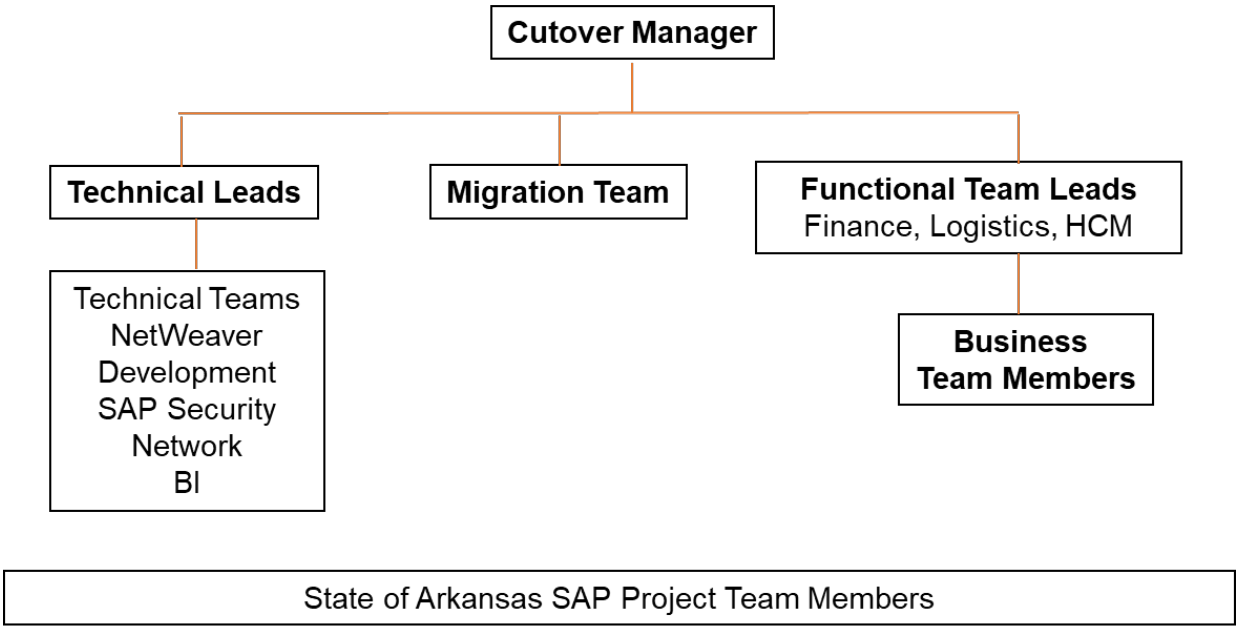


Figure 3 Cutover Organization

Roles and Responsibilities

Cutover Manager	■ Creates and maintains master cutover schedule ■ Defines organization and logistics for cutover ■ Manages cutover issues and their resolution ■ Ensures communication to all stakeholders
Team Lead	■ Create cutover schedule for team as input to the master cutover schedule
Migration Team Lead	■ Creates cutover schedule for migrations as input to the master cutover schedule ■ Manages migration efforts prior to cutover ■ Documents results of each migration effort
Business Team Members	■ Validate converted data and resolve errors ■ Identify and execute key process tests
Project Team	■ Go-Live period support
Key Users	■ First line support

Figure 4 Cutover Organization Roles and Responsibilities

Cutover Schedule

Developing the Cutover Schedule

- Each workstream lead to maintain a list of cutover activities in Team Cutover Schedule
    - Created during ITC 1 and ITC 2
    - Provided to Cutover Manager for use during ITC 2 and future simulation opportunities
    - Once provided to Cutover Manager, the Team schedules are no longer maintained, as there is only one Master Cutover Schedule
- Cutover Manager merges the Team Schedules into the Master Cutover Schedule
    - Executes merged schedule for subsequent cutovers
    - Updates schedule as needed
    - Re-uses the schedule for each simulation

The Master Cutover Schedule will be documented and managed in MS Excel. Predecessors and successors will be known for each task to enable forecasting of time requirements for cutover.

Cutover Simulations

- Simulations include all steps required for the Go Live
    - Tests the cutover process
    - Allows for timing the duration
    - Verifies dependencies
    - Minimizes risks so there are no surprises
- Simulation opportunities include the following events:
    - ITC 2
    - ITC 3
    - UAT
    - Mock Cutover on Production Hardware
        - Walk through of cutover schedule
        - Simulation (repeat as needed)

Production Cutover

Cutover Initiation

Go-Live "Go/No Go Decision" is initiated after a review has been completed of the Go-Live Acceptance Criteria. Once Approval is made, Go-Live continues per this plan.

The following table lists sample acceptance criteria:

1	**Confirmation of the migration of Transports and WRICEF development into Production Environments**:
	The cutover plan steps required to transport configuration and custom programs (WRICEF) items into Production environments and verify settings in the environments including the establishment of document number ranges have been properly completed.
2	**Confirmation of Data Conversion**
	The data required for Go-Live has been migrated and validated in accordance with the Cutover Plan.
3	**Confirmation of the establishment of Print Devices, Fax, email, and communication methods:**
	Print devices and other communication methods required for critical processes (Check Printing for Accounts Payable and Payroll, Purchase Orders, Dunning, Account Statements, etc) have been completed.
4	**Confirmation of migration of Roles and Assignment of End-Users**
	Confirmation that authorization roles to the Production Systems, the assignment of roles to end-users, and the linking of individual employee numbers to Employee Self Service users have been properly completed.
5	**Confirmation of preparation for Go-Live Support**
	Provide guidance to the State's works team in creation of help desk procedures needed to provide two months of Go-Live Support.
6	**Confirmation of System Administration Procedures**
	The system administration procedures needed for system monitoring and tuning are in place, and the procedures needed for backup and recovery have been implemented for the production environments.
7	**SAP Systems Operational**
	The necessary steps in the cutover plan have been executed, the cutover process has been launched successfully, and the SAP systems are operational for the processes that are in scope.

Figure 5 Go-Live Acceptance Criteria

Scope of Activities, Assumptions, and Communications

Scope of Activities

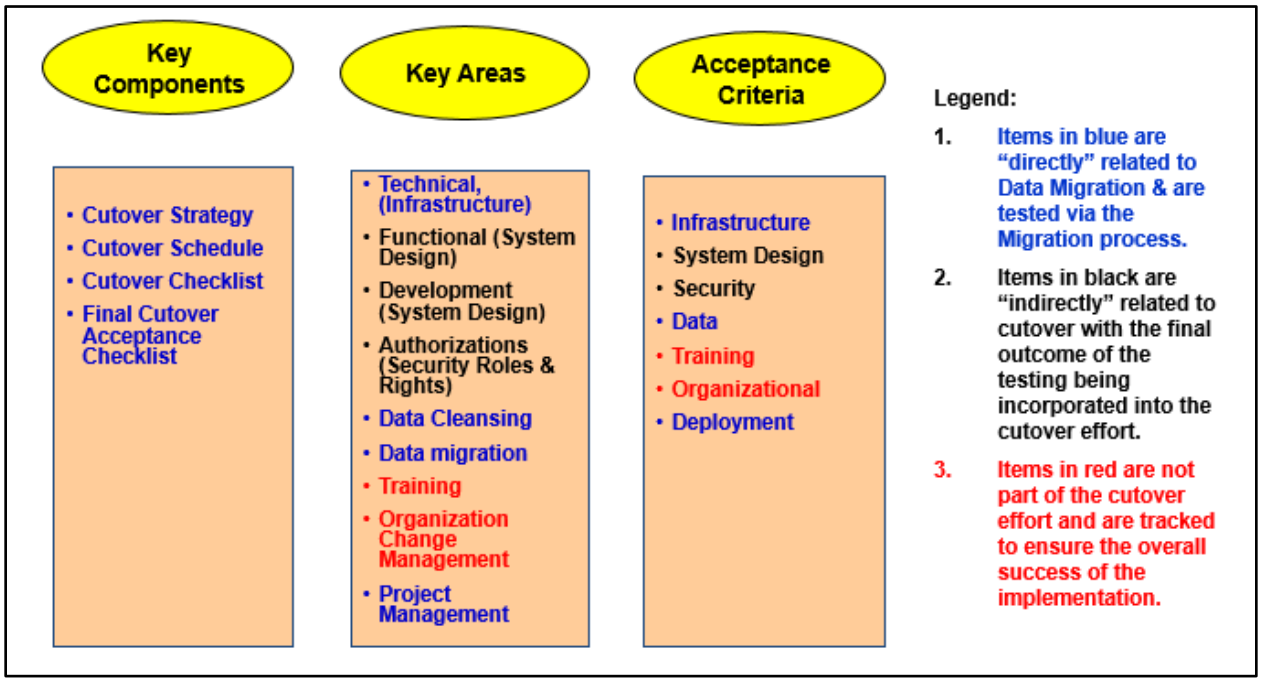


Figure 6 Scope of Activities

Assumptions

- System design work (configuration and enhancements) in scope have been completed and integration tested end-to-end.
- Interfaces from SAP to external Customer systems in scope have been completed and integration tested end-to-end (with new data set), with receiving system resources confirming both receipt and acceptance. (Requires downstream systems (including those connected to XI/PI) to be locked into SAP integration testing and acceptance schedule.)
- All development items (authorizations, reports, forms, migrations, etc.) in scope have been completed and tested.
- The cutover approval process is timely and is based on the approval criteria defined as part of the cutover plan for all concerned areas.
- Pre-requisite and parallel activities are completed and approved prior to the go-live (security roles and rights testing, customer acceptance testing, end-user training, organizational change management activities, etc.).
- Resource constraints will be managed based on priority, criticality and urgency.
- Each team involved possesses sufficient levels of knowledge transfer.

Communications

Internal Project Team Communications			
Audience	**Responsible**	**Method**	**Frequency**
Project Team	Cutover Manager	Project Schedule on sharepoint Email of beginning day's status Email of ending day's status	Minimum of hourly Beginning of work day End of work day
Cutover Person Responsible	Cutover Manager	Phone or electronic communication	As needed, two hours before needed
PMO	Cutover Manager	Email status	every 4 hours

Figure 7 Internal Team Communications

Implementation Support Plan

- Go-Live Support period:
  - Project team staffs post go-live support for sixty (60) calendar days
  - Schedule developed for 12 hours x 5 days support
  - Help Desk phone line coordination (TBD by State resources)
- Long term:
  - Handover to established State support after sixty (60) calendar days
  - Support structure TBD by State

Contingency Plan

- Risks and mitigations for cutover (Project Team).
- Time required to restore legacy systems (State).
- Identify the "point of no return," where Cutover/Go-Live must continue (Cutover Plan/Task List).

Logistics

- Production cutover activities, where possible, will be performed at the Project Office.
  - Certain activities may be performed remote, as indicated in the Cutover Plan
- Cutover Manager contacts person who is next up for execution at least 2 hours in advance
  - If you are on the cutover schedule, check SharePoint or email for status
- All project team members
  - Remain within 1-hour driving distance of the Project Office
  - Are reachable via telephone 24 x 7
  - Building Entry cards to Project Office function 24 x 7

5.0 Microsoft Project Work Plans

Unicode Conversion & HANA Migration Implementation Plan

Unicode Conversion & HANA Migration

ID	Task Name	Duration	Start	Finish	Resource Names
0	**Unicode Conversion & HANA Migration**	**133 days**	**Mon 7/2/18**	**Fri 12/28/18**	
1	**Project Preparation**	**10 days**	**Mon 7/2/18**	**Fri 7/13/18**	
2	Project Kickoff & Governance	5 days	Mon 7/2/18	Fri 7/6/18	YASH & SOA
3	System Requirements/Pre-Checks	5 days	Mon 7/9/18	Fri 7/13/18	BASIS
4	**Sandbox UC Conversion and Migration**	**26 days**	**Mon 7/16/18**	**Fri 8/17/18**	
5	**Migration Preparation**	**2 days**	**Mon 7/16/18**	**Tue 7/17/18**	
6	Implement Pre-requisites for RedHat Linux.				BASIS
7	Install and run HWCCT tool				BASIS
8	Prepare target SAP HANA Database				BASIS
9	System Move: Preparing Target System Landscape				BASIS
10	Consistency Check for Cluster Tables				ABAP
11	Customer code pages Conversion				ABAP
12	Make ABAP programs Unicode-compliant				ABAP
13	Delete Matchcode IDs				ABAP
14	Pre-Conversion Correction of Table Data				ABAP
15	Language Flag Maintenance				ABAP
16	Printing Old Spool Preparation				ABAP
17	OTF Documents Preparation				ABAP
18	Translation Environment				ABAP
19	SPUMG				ABAP
20	**HANA Code Remediation**	**4 days**	**Wed 7/18/18**	**Mon 7/23/18**	
21	Run ABAP code inspector SCI				ABAP
22	Perform ABAP Code Analysis				ABAP
23	Collect SQL profile of system				ABAP
24	Final Preparation Steps				ABAP & BASIS
25	**HANA Migration - Uptime**	**2 days**	**Mon 7/23/18**	**Wed 7/25/18**	
26	Start SUM				BASIS

Page 1

Unicode Conversion & HANA Migration

ID	Task Name	Duration	Start	Finish	Resource Names
27	Extraction				BASIS
28	Configuration				BASIS
29	SAP Note Implementation				BASIS
30	Checks				BASIS
31	Pre-Processing				BASIS
32	Delete QCM tables from your source system				BASIS
33	HANA Migration - Downtime	4 days	Thu 7/26/18	Mon 7/30/18	BASIS
34	**Post Processing**	**4 days**	**Wed 8/1/18**	**Mon 8/6/18**	
35	**HANA Migration**	**2 days**	**Wed 8/1/18**	**Thu 8/2/18**	
36	Lock All Users				BASIS
37	Finalization				BASIS
38	Install License				BASIS
39	Adapt non-SAP directories, file systems, NFS mounts				BASIS
40	Check the SAP parameters of the default and instance				BASIS
41	Check operating system printers				BASIS
42	Run an installation check				BASIS
43	Configure the Transport Management System				BASIS
44	Adapt the RFC destinations				BASIS
45	Check/setup the trusted and trusting RFC relationships				BASIS
46	Clean the transactional RFC				BASIS
47	**Unicode Conversion**	**4 days**	**Wed 8/1/18**	**Mon 8/6/18**	
48	UMG_ADD_POST_STEP				ABAP
49	Special handling of TLOCK* tables				ABAP

Page 2

Unicode Conversion & HANA Migration

ID	Task Name	Duration	Start	Finish	Resource Names
50	Special handling of table DBTABLOG				ABAP
51	Adapt SAP system profile parameters				ABAP
52	RFC Destinations				BASIS
53	TMS RFC connections after the Unicode Conversion				BASIS
54	Spool Requests after Unicode Conversion				BASIS & ABAP
55	**HANA Migration Adaptions**	**2 days**	**Fri 8/3/18**	**Mon 8/6/18**	**All Teams**
56	Interface adaptations				
57	Carry out the mandatory adaptation related to database migration				
58	Mandatory adaptations				
59	Simple optimization				
60	Technical validation of migration				
61	Backup				
62	SPUMG				
63	DEV - Prepare Parallel Landscape preparation	2 days	Tue 8/7/18	Wed 8/8/18	BASIS
64	**Testing**	**10 days**	**Mon 8/6/18**	**Fri 8/17/18**	
65	Unit Testing	5 days	Mon 8/6/18	Fri 8/10/18	YASH
66	Regression Testing	5 days	Mon 8/13/18	Fri 8/17/18	YASH & SOA
67	**HANA Cockpit**	**5 days**	**Mon 8/6/18**	**Fri 8/10/18**	
68	Installation				
69	User and Role creation				
70	Configuration of Cockpit Manager				
71	**Development UC Conversion and Migration**	**25 days**	**Mon 8/20/18**	**Fri 9/21/18**	
72	**Migration Preparation**	**4 days**	**Mon 8/20/18**	**Thu 8/23/18**	

Unicode Conversion & HANA Migration

ID	Task Name	Duration	Start	Finish	Resource Names
73	Implement Pre-requisites for RedHat Linux.				BASIS
74	Install and run HWCCT tool				BASIS
75	Prepare target SAP HANA Database				BASIS
76	System Move: Preparing Target System Landscape				BASIS
77	Consistency Check for Cluster Tables				ABAP
78	Customer code pages Conversion				ABAP
79	Make ABAP programs Unicode-compliant				ABAP
80	Delete Matchcode IDs				ABAP
81	Pre-Conversion Correction of Table Data				ABAP
82	Language Flag Maintenance				ABAP
83	Printing Old Spool Preparation				ABAP
84	OTF Documents Preparation				ABAP
85	Translation Environment				ABAP
86	SPUMG				ABAP
87	**HANA Code Remediation**	**4 days**	**Fri 8/24/18**	**Wed 8/29/18**	
88	Run ABAP code inspector SCI				ABAP
89	Perform ABAP Code Analysis				ABAP
90	Collect SQL profile of system				ABAP
91	Final Preparation Steps				ABAP & BASIS
92	**HANA Migration - Uptime**	**4 days**	**Thu 8/30/18**	**Tue 9/4/18**	
93	Start SUM				BASIS
94	Extraction				BASIS
95	Configuration				BASIS
96	SAP Note Implementation				BASIS
97	Checks				BASIS
98	Pre-Processing				BASIS

Unicode Conversion & HANA Migration

ID	Task Name	Duration	Start	Finish	Resource Names
99	Delete QCM tables from your source system				BASIS
100	HANA Migration - Downtime	4 days	Wed 9/5/18	Mon 9/10/18	BASIS
101	**Post Processing**	**10 days**	**Mon 9/10/18**	**Fri 9/21/18**	
102	**HANA Migration**	**2 days**	**Tue 9/11/18**	**Wed 9/12/18**	
103	Lock All Users				BASIS
104	Finalization				BASIS
105	Install License				BASIS
106	Adapt non-SAP directories, file systems, NFS mounts				BASIS
107	Check the SAP parameters of the default and instance				BASIS
108	Check operating system printers				BASIS
109	Run an installation check				BASIS
110	Configure the Transport Management System				BASIS
111	Adapt the RFC destinations				BASIS
112	Check/setup the trusted and trusting RFC relationships				BASIS
113	Clean the transactional RFC				BASIS
114	**Unicode Conversion**	**4 days**	**Tue 9/11/18**	**Fri 9/14/18**	
115	UMG_ADD_POST_STEP				ABAP
116	Special handling of TLOCK* tables				ABAP
117	Special handling of table DBTABLOG				ABAP
118	Adapt SAP system profile parameters				ABAP
119	RFC Destinations				BASIS

Unicode Conversion & HANA Migration

ID	Task Name	Duration	Start	Finish	Resource Names
120	TMS RFC connections after the Unicode Conversion				BASIS
121	Spool Requests after Unicode Conversion				BASIS & ABAP
122	**HANA Migration Adaptions**	**2 days**	**Thu 9/13/18**	**Fri 9/14/18**	All Teams
123	Interface adaptations				
124	Carry out the mandatory adaptation related to database migration				
125	Mandatory adaptations				
126	Simple optimization				
127	Technical validation of migration				
128	Backup				
129	SPUMG				
130	QAS - Prepare Parallel Landscape preparation	2 days	Mon 9/17/18	Tue 9/18/18	BASIS
131	**Testing**	**5 days**	**Mon 9/17/18**	**Fri 9/21/18**	
132	Unit Testing	5 days	Mon 9/17/18	Fri 9/21/18	YASH
133	String/Link Testing	5 days	Mon 9/17/18	Fri 9/21/18	YASH & SOA
134	**Quality UC Conversion and Migration**	**36 days**	**Mon 9/24/18**	**Sat 11/10/18**	
135	**Migration Preparation**	**2 days**	**Mon 9/24/18**	**Tue 9/25/18**	
136	Implement Pre-requisites for RedHat Linux.				BASIS
137	Install and run HWCCT tool				BASIS
138	Prepare target SAP HANA Database				BASIS
139	System Move: Preparing Target System Landscape				BASIS
140	Consistency Check for Cluster Tables				ABAP
141	Customer code pages Conversion				ABAP

Unicode Conversion & HANA Migration

ID	Task Name	Duration	Start	Finish	Resource Names
142	Make ABAP programs Unicode-compliant				ABAP
143	Delete Matchcode IDs				ABAP
144	Pre-Conversion Correction of Table Data				ABAP
145	Language Flag Maintenance				ABAP
146	Printing Old Spool Preparation				ABAP
147	OTF Documents Preparation				ABAP
148	Translation Environment				ABAP
149	SPUMG				ABAP
150	**HANA Code Remediation**	**2 days**	**Wed 9/26/18**	**Thu 9/27/18**	
151	Run ABAP code inspector SCI				ABAP
152	Perform ABAP Code Analysis				ABAP
153	Collect SQL profile of system				ABAP
154	Final Preparation Steps				ABAP & BASIS
155	**HANA Migration - Uptime**	**2 days**	**Fri 9/28/18**	**Mon 10/1/18**	
156	Start SUM				BASIS
157	Extraction				BASIS
158	Configuration				BASIS
159	SAP Note Implementation				BASIS
160	Checks				BASIS
161	Pre-Processing				BASIS
162	Delete QCM tables from your source system				BASIS
163	HANA Migration - Downtime	3 days	Tue 10/2/18	Thu 10/4/18	BASIS
164	**Post Processing**	**7 days**	**Fri 10/5/18**	**Sat 10/13/18**	
165	**HANA Migration**	**2 days**	**Sat 10/6/18**	**Mon 10/8/18**	
166	Lock All Users				BASIS
167	Finalization				BASIS

Unicode Conversion & HANA Migration

ID	Task Name	Duration	Start	Finish	Resource Names
168	Install License				BASIS
169	Adapt non-SAP directories, file systems, NFS mounts				BASIS
170	Check the SAP parameters of the default and instance				BASIS
171	Check operating system printers				BASIS
172	Run an installation check				BASIS
173	Configure the Transport Management System				BASIS
174	Adapt the RFC destinations				BASIS
175	Check/setup the trusted and trusting RFC relationships				BASIS
176	Clean the transactional RFC	1 day	Mon 10/8/18	Mon 10/8/18	BASIS
177	**Unicode Conversion**	**4 days**	**Fri 10/5/18**	**Wed 10/10/18**	
178	UMG_ADD_POST_STEP				ABAP
179	Special handling of TLOCK* tables				ABAP
180	Special handling of table DBTABLOG				ABAP
181	Adapt SAP system profile parameters				ABAP
182	RFC Destinations				BASIS
183	TMS RFC connections after the Unicode Conversion				BASIS
184	Spool Requests after Unicode Conversion				BASIS & ABAP
185	**HANA Migration Adaptions**	**2 days**	**Mon 10/8/18**	**Tue 10/9/18**	All Teams
186	Interface adaptations				

Unicode Conversion & HANA Migration

ID	Task Name	Duration	Start	Finish	Resource Names
187	Carry out the mandatory adaptation related to database migration				
188	Mandatory adaptations				
189	Simple optimization				
190	Technical validation of migration				
191	Backup				
192	SPUMG				
193	**Testing**	**15 days**	**Mon 10/15/18**	**Fri 11/2/18**	
194	Integration Testing	5 days	Mon 10/15/18	Fri 10/19/18	YASH
195	Performance Testing	3 days	Mon 10/22/18	Wed 10/24/18	YASH
196	UAT	7 days	Thu 10/25/18	Fri 11/2/18	YASH & SOA
197	**Production UC Conversion and Migration**	**12 days**	**Mon 11/12/18**	**Sun 11/25/18**	
198	**Migration Preparation**	**2 days**	**Mon 11/12/18**	**Tue 11/13/18**	
199	Implement Pre-requisites for RedHat Linux.				BASIS
200	Install and run HWCCT tool				BASIS
201	Prepare target SAP HANA Database				BASIS
202	System Move: Preparing Target System Landscape				BASIS
203	Consistency Check for Cluster Tables				ABAP
204	Customer code pages Conversion				ABAP
205	Make ABAP programs Unicode-compliant				ABAP
206	Delete Matchcode IDs				ABAP
207	Pre-Conversion Correction of Table Data				ABAP
208	Language Flag Maintenance				ABAP
209	Printing Old Spool Preparation				ABAP
210	OTF Documents Preparation				ABAP
211	Translation Environment				ABAP
212	SPUMG				ABAP
213	**HANA Code Remediation**	**3 days**	**Tue 11/13/18**	**Thu 11/15/18**	

Unicode Conversion & HANA Migration

ID	Task Name	Duration	Start	Finish	Resource Names
214	Run ABAP code inspector SCI				ABAP
215	Perform ABAP Code Analysis				ABAP
216	Collect SQL profile of system				ABAP
217	Final Preparation Steps				ABAP & BASIS
218	**HANA Migration - Uptime**	**3 days**	**Fri 11/16/18**	**Tue 11/20/18**	
219	Start SUM				BASIS
220	Extraction				BASIS
221	Configuration				BASIS
222	SAP Note Implementation				BASIS
223	Checks				BASIS
224	Pre-Processing				BASIS
225	Delete QCM tables from your source system				BASIS
226	**HANA Migration - Downtime**	**1 day**	**Thu 11/22/18**	**Thu 11/22/18**	BASIS
227	OS Snapshot & HANA Backup	1 day	**Fri 11/23/18**	Fri 11/23/18	YASH & SOA
228	**Post Processing**	**3 days**	**Fri 11/23/18**	**Sun 11/25/18**	
229	OS Snapshot & HANA Backup	1 day	Fri 11/23/18	Fri 11/23/18	YASH & SOA
230	**HANA Migration**				
231	Lock All Users				BASIS
232	Finalization				BASIS
233	Install License				BASIS
234	Adapt non-SAP directories, file systems, NFS mou				BASIS
235	Check the SAP parameters of the default and insta				BASIS
236	Check operating system printers				BASIS
237	Run an installation check				BASIS
238	Configure the Transport Management System				BASIS
239	Adapt the RFC destinations				BASIS
240	Check/setup the trusted and trusting RFC relation				BASIS
241	Clean the transactional RFC				BASIS
242	**Unicode Conversion**				

Unicode Conversion & HANA Migration

ID	Task Name	Duration	Start	Finish	Resource Names
243	UMG_ADD_POST_STEP				ABAP
244	Special handling of TLOCK* tables				ABAP
245	Special handling of table DBTABLOG				ABAP
246	Adapt SAP system profile parameters				ABAP
247	RFC Destinations				BASIS
248	TMS RFC connections after the Unicode Conversion				BASIS
249	Spool Requests after Unicode Conversion				BASIS & ABAP
250	**HANA Migration Adaptions**				**All Teams**
251	Interface adaptations				
252	Carry out the mandatory adaptation related to data				
253	Mandatory adaptations				
254	Simple optimization				
255	Technical validation of migration				
256	Backup				
257	SPUMG				
258	**Testing**	1 day	Sun 11/25/18	Sun 11/25/18	
259	**Contingency / Roll-Back Plan**	**1 day**	**Sun 11/25/18**	**Sun 11/25/18**	
260	SUM Reset /Backup Restore/OS Snapshots				
261	Restore all the interfaces				
262	Start all the Application servers				
263	Validate all the RFC's and Start BTC Jobs				
264	Validate the TMS settings				
265	Release the System to Key users for validations				
266	Release the system to all the end users				
267	**Go-Live & Support**	**25 days**	**Mon 11/26/18**	**Fri 12/28/18**	

BW4HANA Migration Implementation Plan

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
1					
2	**BW4/HANA Upgrade using In-Place Technology**	**115 days**	**Mon 7/2/18**	**Fri 12/7/18**	
3	**Project Preparation**	**10 days**	**Mon 7/2/18**	**Fri 7/13/18**	
4	Project Kickoff & Governance	5 days	Mon 7/2/18	Fri 7/6/18	YASH Project Manager
5	System Requirements/Pre-Checks	5 days	Mon 7/9/18	Fri 7/13/18	
6	**Sandbox BW/4HANA Upgrade**	**30 days**	**Mon 7/16/18**	**Fri 8/24/18**	
7	**Migration Preparation**	**2 days**	**Mon 7/16/18**	**Tue 7/17/18**	
8	Implement pre-requisites for RedHat Linux				Migration Specialist & Infrastructure Specialist-BASIS
9	Install and run HWCCT tool				Migration Specialist & Infrastructure Specialist-BASIS
10	Installation of HANA DB 2.0				Migration Specialist & Infrastructure Specialist-BASIS
11	System Move: Preparing Target System Landscape				Infrastructure Specialist - BASIS
12	Preparing Target Database SAP HANA				Infrastructure Specialist - BASIS
13	**HANA Code Remediation**	**4 days**	**Tue 7/17/18**	**Fri 7/20/18**	
14	Run ABAP code inspector SCI				ABAP
15	Perform ABAP Code Analysis				ABAP
16	Collect SQL profile of system				ABAP
17	Final Preparation Steps				ABAP & Infrastructure Specialist-BASIS
18	**HANA Migration - Uptime**	**2 days**	**Fri 7/20/18**	**Mon 7/23/18**	
19	Start SUM				Migration Specialist, BASIS
20	Extraction				Migration Specialist, BASIS
21	Configuration				Migration Specialist, BASIS

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
22	SAP Note Implementation				Migration Specialist, BASIS
23	Checks				Migration Specialist, BASIS
24	Pre-Processing				Migration Specialist, BASIS
25	Delete QCM tables from your source system				Migration Specialist, BASIS
26	HANA Migration - Downtime	2 days	Tue 7/24/18	Wed 7/25/18	BASIS, Migration Specialist
27	**Post Processing**	**12 days**	**Thu 7/26/18**	**Fri 8/10/18**	
28	**HANA Migration**	**2 days**	**Thu 7/26/18**	**Fri 7/27/18**	
29	Lock All Users				Infrastructure Specialist
30	Finalization				Infrastructure Specialist
31	Install License				Infrastructure Specialist
32	Adapt non-SAP directories, file systems, NFS mounts				Infrastructure Specialist
33	Check the SAP parameters of the default and instance				Infrastructure Specialist
34	Check operating system printers				Infrastructure Specialist
35	Run an installation check				Infrastructure Specialist
36	Configure the Transport Management System				Infrastructure Specialist
37	Adapt the RFC destinations				Infrastructure Specialist
38	Check/setup the trusted and trusting RFC relationships				Infrastructure Specialist
39	Clean the transactional RFC				Infrastructure Specialist
40	**HANA Migration Adaptions**	**2 days**	**Fri 7/27/18**	**Mon 7/30/18**	**ALL Teams**
41	Interface adaptations				
42	Carry out the mandatory adaptation related to database migration				

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
43	Mandatory adaptations				
44	Simple optimization				
45	Technical validation of migration				
46	Backup				BASIS
47	**BW/4HANA Conversion**	**10 days**	**Mon 7/30/18**	**Fri 8/10/18**	
48	Download Software using Maintenance Planner				Migration Specialist, BASIS
49	**Preparation**				**ABAP & BW Specialist**
50	Simplification Lists				
51	Pre-Checks				
52	Custom code migration				
53	Initial System Configuration				Migration Specialist, BASIS
54	SAP BW/4HANA Starter Add-on				Migration Specialist, BASIS
55	Operating Modes				Migration Specialist, BASIS
56	List of Object-Specific Conversion Activities				BW Specialist, ABAP & Infrastructure Specialist-BASIS, Migration Specialist
57	Object Conversion Using Scope Transfer Tool				BW Specialist, ABAP & Infrastructure Specialist-BASIS, Migration Specialist

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
58	Object Deletion Using Clean-up Tools				BW Specialist, ABAP & Infrastructure Specialist-BASIS, Migration Specialist
59	Custom Code Adjustments				BW Specialist, ABAP & Infrastructure Specialist-BASIS, Migration Specialist, ABAP
60	Technical System Conversion				BW Specialist, ABAP & Infrastructure Specialist-BASIS, Migration Specialist, ABAP
61	General Follow-on Activities				BW Specialist, ABAP & Infrastructure Specialist-BASIS, Migration Specialist, ABAP
62	List of Object-Specific Follow-On Activities				BW Specialist, ABAP & Infrastructure Specialist-BASIS, Migration Specialist, ABAP
63	Security & Authorization adaptations				Security, BASIS, BW Specialist, Migration
64	BW Query Adaption				BW Specialist
65	Data Transfer Processes				BW Specialist, Infrastructure Specialist -
66	Custom Code Adjustments				ABAP & Infrastructure Specialist-BASIS, BW Specialist

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
67	Unit Testing / Update issues logs				BASIS, Infrastructure Specialist,
68	**Testing**	**10 days**	**Mon 8/13/18**	**Fri 8/24/18**	
69	Unit Testing				YASH
70	Regression Testing				YASH & SOA
71	**Development BW/4HANA Upgrade**	**25 days**	**Mon 8/20/18**	**Fri 9/21/18**	
72	**Migration Preparation**	**5 days**	**Mon 8/20/18**	**Fri 8/24/18**	
73	Prepare parallel Landscape & System Refresh				Infrastructure Specialist - BASIS
74	Implement pre-requisites for RedHat Linux				Migration Specialist & Infrastructure Specialist-BASIS
75	Install and run HWCCT tool				Migration Specialist & Infrastructure Specialist-BASIS
76	Installation of HANA DB 2.0				Migration Specialist & Infrastructure Specialist-BASIS
77	System Move: Preparing Target System Landscape				Infrastructure Specialist - BASIS
78	Preparing Target Database SAP HANA				Infrastructure Specialist - BASIS
79	**HANA Code Remediation**	**3 days**	**Wed 8/22/18**	**Fri 8/24/18**	
80	Run ABAP code inspector SCI				ABAP
81	Perform ABAP Code Analysis				ABAP
82	Collect SQL profile of system				ABAP
83	Final Preparation Steps				ABAP & Infrastructure Specialist-BASIS
84	**HANA Migration - Uptime**	**2 days**	**Fri 8/24/18**	**Mon 8/27/18**	

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
85	Start SUM				Migration Specialist & Infrastructure Specialist-BASIS
86	Extraction				Migration Specialist & Infrastructure Specialist-BASIS
87	Configuration				Migration Specialist & Infrastructure Specialist-BASIS
88	SAP Note Implementation				Migration Specialist & Infrastructure Specialist-BASIS
89	Checks				Migration Specialist & Infrastructure Specialist-BASIS
90	Pre-Processing				Migration Specialist & Infrastructure Specialist-BASIS
91	Delete QCM tables from your source system				Migration Specialist & Infrastructure Specialist-BASIS
92	HANA Migration - Downtime	2 days	Tue 8/28/18	Wed 8/29/18	Migration Specialist & Infrastructure Specialist-BASIS
93	**Post Processing**	**13 days**	**Wed 8/29/18**	**Fri 9/14/18**	
94	**HANA Migration**	**2 days**	**Wed 8/29/18**	**Thu 8/30/18**	
95	Lock All Users				Infrastructure Specialist
96	Finalization				Infrastructure Specialist
97	Install License				Infrastructure Specialist

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
98	Adapt non-SAP directories, file systems, NFS mounts				Infrastructure Specialist
99	Check the SAP parameters of the default and instance				Infrastructure Specialist
100	Check operating system printers				Infrastructure Specialist
101	Run an installation check				Infrastructure Specialist
102	Configure the Transport Management System				Infrastructure Specialist
103	Adapt the RFC destinations				Infrastructure Specialist
104	Check/setup the trusted and trusting RFC relationships				Infrastructure Specialist
105	Clean the transactional RFC				Infrastructure Specialist
106	**HANA Migration Adaptions**	**2 days**	**Thu 8/30/18**	**Fri 8/31/18**	**ALL Teams**
107	Interface adaptations				
108	Carry out the mandatory adaptation related to database migration				
109	Mandatory adaptations				
110	Simple optimization				
111	Technical validation of migration				
112	Backup				BASIS
113	**BW/4HANA Conversion**	**8 days**	**Fri 8/31/18**	**Tue 9/11/18**	

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
114	Download Software using Maintenance Planner				Migration Specialist, BASIS
115	**Preparation**				**ABAP & BW Specialist**
116	Simplification Lists				
117	Pre-Checks				
118	Custom code migration				
119	Initial System Configuration				Migration Specialist, BASIS
120	SAP BW/4HANA Starter Add-on				Migration Specialist, BASIS
121	Operating Modes				Migration Specialist, BASIS
122	List of Object-Specific Conversion Activities				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist
123	Object Conversion Using Scope Transfer Tool				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist
124	Object Deletion Using Clean-up Tools				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist
125	Custom Code Adjustments				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist,ABAP
126	Technical System Conversion				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist,ABAP

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
127	General Follow-on Activities				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist,ABAP
128	List of Object-Specific Follow-On Activities				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist,ABAP
129	Security & Authorization adaptations				Security,BASIS,BW Specialist,Migration Specialist
130	BW Query Adaption				BW Specialist
131	Data Transfer Processes				BW Specialist,Infrastructure Specialist - BASIS
132	Custom Code Adjustments				ABAP & Infrastructure Specialist-BASIS,BW Specialist
133	Unit Testing / Update issues logs				BASIS,Infrastructure Specialist,Migration Specialist,Security
134	**Testing**	**9 days**	**Tue 9/11/18**	**Fri 9/21/18**	
135	Unit Testing				YASH
136	String/Link Testing				YASH & SOA
137	**Quality BW/4HANA Upgrade**	**30 days**	**Mon 9/17/18**	**Fri 10/26/18**	
138	**Migration Preparation**	**5 days**	**Mon 9/17/18**	**Fri 9/21/18**	
139	Prepare parallel Landscape & System Refresh				Infrastructure Specialist - BASIS

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
140	Implement pre-requisites for RedHat Linux				Migration Specialist & Infrastructure Specialist-BASIS
141	Install and run HWCCT tool				Migration Specialist & Infrastructure Specialist-BASIS
142	Installation of HANA DB 2.0				Migration Specialist & Infrastructure Specialist-BASIS
143	System Move: Preparing Target System Landscape				Infrastructure Specialist - BASIS
144	Preparing Target Database SAP HANA				Infrastructure Specialist - BASIS
145	**HANA Code Remediation**	**3 days**	**Wed 9/19/18**	**Fri 9/21/18**	
146	Run ABAP code inspector SCI				ABAP
147	Perform ABAP Code Analysis				ABAP
148	Collect SQL profile of system				ABAP
149	Final Preparation Steps				ABAP & Infrastructure Specialist-BASIS
150	**HANA Migration - Uptime**	**2 days**	**Fri 9/21/18**	**Mon 9/24/18**	
151	Start SUM				Migration Specialist, BASIS
152	Extraction				Migration Specialist, BASIS
153	Configuration				Migration Specialist, BASIS
154	SAP Note Implementation				Migration Specialist, BASIS
155	Checks				Migration Specialist, BASIS
156	Pre-Processing				Migration Specialist, BASIS
157	Delete QCM tables from your source system				Migration Specialist, BASIS
158	HANA Migration - Downtime	2 days	Mon 9/24/18	Tue 9/25/18	BASIS, Migration Specialist
159	**Post Processing**	**13 days**	**Tue 9/25/18**	**Thu 10/11/18**	

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
160	**HANA Migration**	**2 days**	**Tue 9/25/18**	**Wed 9/26/18**	
161	Lock All Users				Infrastructure Specialist
162	Finalization				Infrastructure Specialist
163	Install License				Infrastructure Specialist
164	Adapt non-SAP directories, file systems, NFS mounts				Infrastructure Specialist
165	Check the SAP parameters of the default and instance				Infrastructure Specialist
166	Check operating system printers				Infrastructure Specialist
167	Run an installation check				Infrastructure Specialist
168	Configure the Transport Management System				Infrastructure Specialist
169	Adapt the RFC destinations				Infrastructure Specialist
170	Check/setup the trusted and trusting RFC relationships				Infrastructure Specialist
171	Clean the transactional RFC				Infrastructure Specialist
172	**HANA Migration Adaptions**	**2 days**	**Wed 9/26/18**	**Thu 9/27/18**	**ALL Teams**
173	Interface adaptations				
174	Carry out the mandatory adaptation related to database migration				
175	Mandatory adaptations				
176	Simple optimization				

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
177	Technical validation of migration				
178	Backup				BASIS
179	**BW/4HANA Conversion**	**8 days**	**Thu 9/27/18**	**Mon 10/8/18**	
180	Download Software using Maintenance Planner	1 day	Thu 9/27/18	Thu 9/27/18	Migration Specialist, BASIS
181	**Preparation**				**ABAP & BW Specialist**
185	Initial System Configuration				Migration Specialist, BASIS
186	SAP BW/4HANA Starter Add-on				Migration Specialist, BASIS
187	Operating Modes				Migration Specialist, BASIS
188	List of Object-Specific Conversion Activities				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist
189	Object Conversion Using Scope Transfer Tool				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist
190	Object Deletion Using Clean-up Tools				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist
191	Custom Code Adjustments				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist,ABAP

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
192	Technical System Conversion				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist,ABAP
193	General Follow-on Activities				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist,ABAP
194	List of Object-Specific Follow-On Activities				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist,ABAP
195	Security & Authorization adaptations				Security,BASIS,BW Specialist,Migration Specialist
196	BW Query Adaption				BW Specialist
197	Data Transfer Processes				BW Specialist,Infrastructure Specialist - BASIS
198	Custom Code Adjustments				ABAP & Infrastructure Specialist-BASIS,BW Specialist
199	Unit Testing / Update issues logs				BASIS,Infrastructure Specialist,Migration Specialist,Security
200	**Integration Testing**	**10 days**	**Mon 10/8/18**	**Fri 10/19/18**	YASH
201	**User Acceptance Testing**	**5 days**	**Mon 10/22/18**	**Fri 10/26/18**	YASH & SOA
202	**Production BACKUP**				

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
203	**Production BW/4HANA Upgrade**	**11 days**	**Mon 10/29/18**	**Mon 11/12/18**	
204	**Migration Preparation**	**2 days**	**Mon 10/29/18**	**Tue 10/30/18**	
205	Implement pre-requisites for RedHat Linux				Migration Specialist & Infrastructure Specialist-BASIS
206	Install and run HWCCT tool				Migration Specialist & Infrastructure Specialist-BASIS
207	Installation of HANA DB 2.0				Migration Specialist & Infrastructure Specialist-BASIS
208	System Move: Preparing Target System Landscape				Infrastructure Specialist - BASIS
209	Preparing Target Database SAP HANA				Infrastructure Specialist - BASIS
210	**HANA Code Remediation**	**2 days**	**Wed 10/31/18**	**Thu 11/1/18**	
211	Run ABAP code inspector SCI				ABAP
212	Perform ABAP Code Analysis				ABAP
213	Collect SQL profile of system				ABAP
214	Final Preparation Steps				ABAP & Infrastructure Specialist-BASIS
215	**HANA Migration - Uptime**	**2 days**	**Fri 11/2/18**	**Mon 11/5/18**	
216	Start SUM				Migration Specialist, BASIS
217	Extraction				Migration Specialist, BASIS
218	Configuration				Migration Specialist, BASIS
219	SAP Note Implementation				Migration Specialist, BASIS
220	Checks				Migration Specialist, BASIS
221	Pre-Processing				Migration Specialist, BASIS
222	Delete QCM tables from your source system				Migration Specialist, BASIS

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
223	HANA Migration - Downtime	1 day	Fri 11/9/18	Fri 11/9/18	BASIS, Migration Specialist
224	**Post Processing**	**2 days**	**Fri 11/9/18**	**Mon 11/12/18**	
225	**HANA Migration**	**1 day**	**Fri 11/9/18**	**Fri 11/9/18**	
226	Lock All Users				Infrastructure Specialist
227	Finalization				Infrastructure Specialist
228	Install License				Infrastructure Specialist
229	Adapt non-SAP directories, file systems, NFS mounts				Infrastructure Specialist
230	Check the SAP parameters of the default and instance				Infrastructure Specialist
231	Check operating system printers				Infrastructure Specialist
232	Run an installation check				Infrastructure Specialist
233	Configure the Transport Management System				Infrastructure Specialist
234	Adapt the RFC destinations				Infrastructure Specialist
235	Check/setup the trusted and trusting RFC relationships				Infrastructure Specialist
236	Clean the transactional RFC				Infrastructure Specialist
237	**HANA Migration Adaptions**	**1 day**	**Fri 11/9/18**	**Fri 11/9/18**	**ALL Teams**
238	Interface adaptations				
239	Carry out the mandatory adaptation related to database migration				
240	Mandatory adaptations				
241	Simple optimization				

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
242	Technical validation of migration				
243	Backup				BASIS
244	**BW/4HANA Conversion**	**2 days**	**Sat 11/10/18**	**Sun 11/11/18**	
245	Download Software using Maintenance Planner	1 day	Mon 11/12/18	Mon 11/12/18	Migration Specialist, BASIS
246	**Preparation**				**ABAP & BW Specialist**
247	Simplification Lists				
248	Pre-Checks				
249	Custom code migration				
250	Initial System Configuration				Migration Specialist, BASIS
251	SAP BW/4HANA Starter Add-on				Migration Specialist, BASIS
252	Operating Modes				Migration Specialist, BASIS
253	List of Object-Specific Conversion Activities	1 day	Mon 11/12/18	Mon 11/12/18	BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist
254	Object Conversion Using Scope Transfer Tool				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist
255	Object Deletion Using Clean-up Tools				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
256	Custom Code Adjustments				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist,ABAP
257	Technical System Conversion				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist,ABAP
258	General Follow-on Activities	1 day	Mon 11/12/18	Mon 11/12/18	BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist,ABAP
259	List of Object-Specific Follow-On Activities	1 day	Mon 11/12/18	Mon 11/12/18	BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist,ABAP
260	Security & Authorization adaptations				Security,BASIS,BW Specialist,Migration Specialist
261	BW Query Adaption				BW Specialist
262	Data Transfer Processes				BW Specialist,Infrastructure Specialist - BASIS
263	Custom Code Adjustments				ABAP & Infrastructure Specialist-BASIS,BW Specialist
264	**Unit Testing**	**1 day**	**Sun 11/11/18**	**Sun 11/11/18**	SOA & YASH
265	**Contiengency / Roll-Back Plan**	**1 day**	**Sun 11/11/18**	**Sun 11/11/18**	
266	Backup Restore				
267	Restore all the interfaces				

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
268	Start all the Application servers				
269	Validate all the RFC's and Start BTC Jobs				
270	Validate the TMS settings				
271	Release the System to Key users for validatio				
272	Release the system to all the end users				
273	**Production Post Go-Live Support**	**20 days**	**Mon 11/12/18**	**Fri 12/7/18**	YASH
274					

SOA-UCnHM-Go-Live Plan

Unicode Conversion & HANA Migration Go-Live Plan

ID	Task Name	Duration	Start	Finish	Resource Names
0	**Unicode Conversion & HANA Migration Go-Live Plan**	**13 days**	**Mon 11/12/18**	**Mon 11/26/18**	
1	**Production UC Conversion and Migration**	**12 days**	**Mon 11/12/18**	**Sun 11/25/18**	
2	**Unicode Conversion & Migration Preparation**	**2 days**	**Mon 11/12/18**	**Tue 11/13/18**	
3	Implement Pre-requisites for RedHat Linux.				BASIS
4	Install and run HWCCT tool				BASIS
5	Prepare target SAP HANA Database				BASIS
6	System Move: Preparing Target System Landscape				BASIS
7	Check if canceled or pending update requests exist in the system				BASIS
8	Set all released jobs from Released to Scheduled				BASIS
9	Adapt the operation mode timetable				BASIS
10	Write down the logical system names				BASIS
11	Delete QCM tables from your source system				BASIS
12	Generating DDL Statements				BASIS
13	Consistency Check for Cluster Tables				ABAP
14	Customer code pages Conversion				ABAP
15	Make ABAP programs Unicode-compliant				ABAP
16	Delete Matchcode IDs				ABAP
17	Pre-Conversion Correction of Table Data				ABAP
18	Language Flag Maintenance				ABAP
19	Printing Old Spool Preparation				ABAP
20	OTF Documents Preparation				ABAP
21	Translation Environment				ABAP
22	SPUMG				ABAP
23	**HANA Code Remediation**	**3 days**	**Tue 11/13/18**	**Thu 11/15/18**	
24	Run ABAP code inspector SCI				ABAP
25	Perform ABAP Code Analysis				ABAP
26	Collect SQL profile of system				ABAP
27	Final Preparation Steps				ABAP & BASIS
28	**HANA Migration - Uptime**	**3 days**	**Fri 11/16/18**	**Tue 11/20/18**	
29	Start SUM				BASIS
30	Extraction				BASIS
31	Configuration				BASIS
32	SAP Note Implementation				BASIS
33	Checks				BASIS
34	Pre-Processing				BASIS
35	Delete QCM tables from your source system				BASIS
36	**HANA Migration - Downtime**	**1 day**	**Thu 11/22/18**	**Thu 11/22/18**	BASIS
37	OS Snapshot & HANA Backup	1 day	**Fri 11/23/18**	Fri 11/23/18	YASH & SOA
38	**Post Processing**	**3 days**	**Fri 11/23/18**	**Sun 11/25/18**	
39	OS Snapshot & HANA Backup	1 day	Fri 11/23/18	Fri 11/23/18	YASH & SOA
40	**HANA Migration**				
41	Lock All Users				BASIS

Page 1

Unicode Conversion & HANA Migration Go-Live Plan

ID	Task Name	Duration	Start	Finish	Resource Names
42	Finalization				BASIS
43	Install License				BASIS
44	Adapt non-SAP directories, file systems, NFS mounts				BASIS
45	Check the SAP parameters of the default and instance				BASIS
46	Check operating system printers				BASIS
47	Run an installation check				BASIS
48	Configure the Transport Management System				BASIS
49	Adapt the RFC destinations				BASIS
50	Check/setup the trusted and trusting RFC relationships				BASIS
51	Clean the transactional RFC				BASIS
52	**Unicode Conversion**				
53	UMG_ADD_POST_STEP				ABAP
54	Special handling of TLOCK* tables				ABAP
55	Special handling of table DBTABLOG				ABAP
56	Adapt SAP system profile parameters				ABAP
57	RFC Destinations				BASIS
58	TMS RFC connections after the Unicode Conversion				BASIS
59	Spool Requests after Unicode Conversion				BASIS & ABAP
60	**HANA Migration Adaptions**				**All Teams**
61	Interface adaptations				
62	Carry out the mandatory adaptation related to database migration				
63	Mandatory adaptations				
64	Simple optimization				
65	Technical validation of migration				
66	Backup				
67	SPUMG				
68	**Interface migraiton**				**All Teams**
69	**Testing**	1 day	Sun 11/25/18	Sun 11/25/18	
70	**Contingency / Roll-Back Plan**	**1 day**	**Sun 11/25/18**	**Sun 11/25/18**	
71	SUM Reset /Backup Restore/OS Snapshots				
72	Restore all the interfaces				
73	Start all the Application servers				
74	Validate all the RFC's and Start BTC Jobs				
75	Validate the TMS settings				
76	Release the System to Key users for validations				
77	Release the system to all the end users				
78	**Production Go-Live**	**1 day**	**Mon 11/26/18**	**Mon 11/26/18**	

Page 2

SOA-BW4HANA - Go-Live Plan

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
1					
2	**BW4/HANA Upgrade - Production Go-Live Plan**	**11 days**	**Mon 10/29/18**	**Sun 11/11/18**	
3	**Production BACKUP**				
4	**Production BW/4HANA Upgrade**	**11 days**	**Mon 10/29/18**	**Sun 11/11/18**	
5	**Migration Preparation**	**2 days**	**Mon 10/29/18**	**Tue 10/30/18**	
6	Implement pre-requisites for RedHat Linux				Migration Specialist & Infrastructure Specialist-BASIS
7	Install and run HWCCT tool				Migration Specialist & Infrastructure Specialist-BASIS
8	Installation of HANA DB 2.0				Migration Specialist & Infrastructure Specialist-BASIS
9	System Move: Preparing Target System Landscape				Infrastructure Specialist - BASIS
10	Preparing Target Database SAP HANA				Infrastructure Specialist - BASIS
11	**HANA Code Remediation**	**2 days**	**Wed 10/31/18**	**Thu 11/1/18**	
12	Run ABAP code inspector SCI				ABAP
13	Perform ABAP Code Analysis				ABAP
14	Collect SQL profile of system				ABAP
15	Final Preparation Steps				ABAP & Infrastructure Specialist-BASIS
16	**HANA Migration - Uptime**	**2 days**	**Fri 11/2/18**	**Mon 11/5/18**	
17	Start SUM				Migration Specialist, BASIS
18	Extraction				Migration Specialist, BASIS
19	Configuration				Migration Specialist, BASIS
20	SAP Note Implementation				Migration Specialist, BASIS
21	Checks				Migration Specialist, BASIS
22	Pre-Processing				Migration Specialist, BASIS
23	Delete QCM tables from your source system				Migration Specialist, BASIS
24	HANA Migration - Downtime	1 day	Fri 11/9/18	Fri 11/9/18	BASIS, Migration Specialist
25	**Post Processing**	**2 days**	**Fri 11/9/18**	**Sun 11/11/18**	
26	**HANA Migration**	**1 day**	**Fri 11/9/18**	**Fri 11/9/18**	
27	Lock All Users				Infrastructure Specialist
28	Finalization				Infrastructure Specialist
29	Install License				Infrastructure Specialist
30	Adapt non-SAP directories, file systems, NFS mounts				Infrastructure Specialist
31	Check the SAP parameters of the default and instance				Infrastructure Specialist
32	Check operating system printers				Infrastructure Specialist
33	Run an installation check				Infrastructure Specialist

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
34	Configure the Transport Management System				Infrastructure Specialist
35	Adapt the RFC destinations				Infrastructure Specialist
36	Check/setup the trusted and trusting RFC relationships				Infrastructure Specialist
37	Clean the transactional RFC				Infrastructure Specialist
38	**HANA Migration Adaptions**	**1 day**	**Fri 11/9/18**	**Fri 11/9/18**	**ALL Teams**
39	Interface adaptations				
40	Carry out the mandatory adaptation related to database migration				
41	Mandatory adaptations				
42	Simple optimization				
43	Technical validation of migration				
44	Backup				BASIS
45	**Interface Migration**	**1 day**	**Sat 11/10/18**	Sat 11/10/18	**ALL Teams**
46	**BW/4HANA Conversion**	**2 days**	**Sat 11/10/18**	**Sun 11/11/18**	
47	Download Software using Maintenance Planner	1 day	Mon 11/12/18	Mon 11/12/18	Migration Specialist, BASIS
48	**Preparation**				**ABAP & BW Specialist**
49	Simplification Lists				
50	Pre-Checks				
51	Custom code migration				
52	Initial System Configuration				Migration Specialist, BASIS
53	SAP BW/4HANA Starter Add-on				Migration Specialist, BASIS
54	Operating Modes				Migration Specialist, BASIS
55	List of Object-Specific Conversion Activities	1 day	Mon 11/12/18	Mon 11/12/18	BW Specialist, ABAP & Infrastructure Specialist-BASIS, Migration Specialist
56	Object Conversion Using Scope Transfer Tool				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist
57	Object Deletion Using Clean-up Tools				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist

SOA-BW4HANA - In Place -041518

ID	Task Name	Duration	Start	Finish	Resource Names
58	Custom Code Adjustments				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist,ABAP
59	Technical System Conversion				BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist,ABAP
60	General Follow-on Activities	1 day	Mon 11/12/18	Mon 11/12/18	BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist,ABAP
61	List of Object-Specific Follow-On Activities	1 day	Mon 11/12/18	Mon 11/12/18	BW Specialist,ABAP & Infrastructure Specialist-BASIS, Migration Specialist,ABAP
62	Security & Authorization adaptations				Security,BASIS,BW Specialist,Migration Specialist
63	BW Query Adaption				BW Specialist
64	Data Transfer Processes				BW Specialist,Infrastructure Specialist - BASIS
65	Custom Code Adjustments				ABAP & Infrastructure Specialist-BASIS,BW Specialist
66	**Unit Testing**	**1 day**	**Sun 11/11/18**	**Sun 11/11/18**	SOA & YASH
67	**Contingency / Roll-Back Plan**	**1 day**	**Sun 11/11/18**	**Sun 11/11/18**	
68	Backup Restore				
69	Restore all the interfaces				
70	Start all the Application servers				
71	Validate all the RFC's and Start BTC Jobs				
72	Validate the TMS settings				
73	Release the System to Key users for validations				
74	Release the system to all the end users				
75	**Production Go-Live**	**1 day**	**Mon 11/12/18**	**Mon 11/12/18**	YASH
76					

Template T-6

RFP Response Checklist

Response Template

YASH Technologies, Inc.

RFP #: SP-18-0087

Table of Contents

List of Tables

1.0 Prospective Contractor Response Checklist

The Prospective Contractor should complete the following Tables to verify that all the RFP response requirements have been completed as instructed. The Prospective Contractor should provide specific references to Proposal locations (e.g., section and page numbers) for each Template included. During the evaluation process, OSP will perform an initial review of the Proposals to confirm these are included. If the items identified in this checklist are not included, the Proposal may be disqualified.

Instructions: Complete the following Table. Do not change any of the completed cells. Any changes to the completed cells could lead to the disqualification of the Proposal.

Table 1. Prospective Contractor General Requirements

PROPOSAL RESPONSE ITEM	COMPLETED AND PROVIDED AS INSTRUCTED?	
Prospective Contractor's Proposal's stamped date meets date and time specified in the RFP	YES ☒	NO ☐
Proposal is sealed	YES ☒	NO ☐
Technical Proposal and Cost Proposal are sealed in separate envelopes or boxes within the "Sealed Bid." Each Proposal should be clearly marked "Technical Proposal" or "Cost Proposal"	YES ☒	NO ☐
Minimum Mandatory Requirements – The Prospective Contractor has documented proof that it meets the minimum mandatory requirements outlined in the RFP.	YES ☒	NO ☐

Table 2. Prospective Contractor Package 1 Checklist

SECTION / TEMPLATE	PROPOSAL RESPONSE ITEM	COMPLETED AND PROVIDED AS INSTRUCTED?		REFERENCE TO PROPOSAL RESPONSE SECTION
T-1	Cover Letter and Executive Summary	YES ☒	NO ☐	Technical Proposal; TAB T-1
T-2	Prospective Contractor Experience	YES ☒	NO ☐	Technical Proposal; TAB T-2
T-3	Prospective Contractor Engagement Organization and Staffing	YES ☒	NO ☐	Technical Proposal; TAB T-3
T-4	Requirements Approach	YES ☒	NO ☐	Technical Proposal; TAB T-4
T-5	Required Plans	YES ☒	NO ☐	Technical Proposal; TAB T-5
T-6	RFP Response Checklist	YES ☒	NO ☐	Technical Proposal; TAB T-6

Table 3. Prospective Contractor Package 2 Checklist

SECTION / TEMPLATE	PROPOSAL RESPONSE ITEM	COMPLETED AND PROVIDED AS INSTRUCTED?		REFERENCE TO PROPOSAL RESPONSE SECTION
C-1	Cost Workbook	YES ☒	NO ☐	Cost Proposal; C-1 ATCH. C-1_A

Table 4. Prospective Contractor General Requirements

Prospective Contractor should provide the following documents with their technical proposal response.

PROPOSAL RESPONSE ITEM	COMPLETED AND PROVIDED AS INSTRUCTED?	
EO 98-04 Disclosure Form. (See *Standard Terms and Conditions, #27. Disclosure*.)	YES ☒	NO ☐
Copy of Prospective Contractor's *Equal Opportunity Policy*. (See *Equal Opportunity Policy*.)	YES ☒	NO ☐
Voluntary Product Accessibility Template (VPAT). (See *Technology Access.*)	YES ☒	NO ☐

2.0 Prospective Contractor Attachments

The Prospective Contractor should identify all attachments that are part of the Technical or Cost Proposals. The Prospective Contractor should provide specific references to Proposal locations (e.g., section and page numbers) for each attachment included. All attachments must be included in both soft and hard Proposal copies.

Instructions: Complete the following Table with any attachments to the Technical or Cost Proposals. Add rows as necessary. Do not change any of the completed cells. Any changes to the completed cells could lead to the disqualification of the Proposal.

Table 5. Prospective Contractor Attachment Checklist

ATTACHMENT ID	ATTACHMENT NAME	ATTACHMENT PROVIDED?		REFERENCE TO PROPOSAL RESPONSE SECTION
Attachment T-6 A	System Information Sharing Agreement - YASH	YES ☒	NO ☐	Technical Proposal; T-6 ATCH. T-6_A
Attachment T-6 B	Vendor Confidentiality Agreement - YASH	YES ☒	NO ☐	Technical Proposal; T-6 ATCH. T-6_B
Attachment T-6 C	System: ECQ - YASH	YES ☒	NO ☐	Technical Proposal; T-6 ATCH. T-6_C
Attachment T-6 D	EO 98-04 Disclosure Form - YASH	YES ☒	NO ☐	Technical Proposal; T-6 ATCH. T-6_D
Attachment T-6 E	Equal Opportunity Policy - YASH	YES ☒	NO ☐	Technical Proposal; T-6 ATCH. T-6_E
Attachment T-6 F	Voluntary Product Accessibility Template (VPAT) - YASH	YES ☒	NO ☐	Technical Proposal; T-6 ATCH. T-6_F
Attachment T-6 G	Minority Vendor Certificate – NMSDC - YASH	YES ☒	NO ☐	Technical Proposal; T-6 ATCH. T-6_G

3.0 Exceptions

Any requested exceptions to items in this RFP which are NON-mandatory **must** be declared below or as an attachment to this page. Prospective Contractor **must** clearly explain the requested exception, and should label the request to reference the specific solicitation item number to which the exception applies.

Exceptions to Requirements **shall** cause the Prospective Contractor's proposal to be disqualified.

YASH takes no exceptions to the requirements outlined in the RFP.

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Attachment T-6_A

RFP #: SP-18-0087

The section following this page will contain the attachment identified below:

ATTACHMENT ID	ATTACHMENT NAME	ATTACHMENT PROVIDED?		REFERENCE TO PROPOSAL RESPONSE SECTION
Attachment T-6 A	System Information Sharing Agreement - YASH	YES ☒	NO ☐	Technical Proposal; T-6 ATCH. T-6_A

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DFA Arkansas Department of Finance & Administration

System Information Sharing Agreement

I. Purpose

This agreement provides for the release of personally identifiable information (PII) contained in the (Critical System) AASIS TECHNICAL ECOSYSTEM (hereafter "SYSTEM") maintained by the Arkansas Department of Finance and Administration (DFA), to YASH TECHNOLOGIES INC (hereafter, "User"). For purposes of this agreement, "User" shall include the entity (state agency, organization, court, etc.) and those employees authorized by User to perform their official duties for which access to SYSTEM information is required.

II. Authority

This agreement is made under authority required by many Federal Regulatory bodies (IRS, SSA, CMMS, etc.) to release to User confidential information maintained in the SYSTEM. DFA shall only release to User confidential information contained in the SYSTEM consistent with a permissible use as authorized by the above mentioned regulatory bodies.

III. Information to Be Shared

DFA shall release to User "personal information," as defined in the appendix of OMB M-10-23 (Guidance for Agency Use of Third-Party Website and Applications); to wit: PII "refers to information that can be used to distinguish or trace an individual's identity, either alone or when combined with other personal or identifying information that is linked or linkable to a specific individual." This information may be contained in the SYSTEM for a permissible use. All information to be released by DFA to User is confidential information and User shall abide by all state and federal laws and DFA confidentiality requirements.

IV. Responsibilities and Functions

DFA shall grant User access to DFA's SYSTEM information only for a permissible use as authorized by the Federal Regulatory bodies. User's access and use of SYSTEM information shall be restricted to those authorized individuals that require the information to perform their official duties.

V. Security

A. For each person that is to have access to SYSTEM information, User is responsible for having each person sign a Confidentiality Agreement form provided by DFA. Copies of the Confidentiality Agreement will be made available to DFA upon request as well as for regulatory audits. User agrees to update Confidentiality Agreements of each person granted access to the SYSTEM information on a yearly basis. User will provide to DFA the name, address, job title, e-mail address, employee or personnel number, and date of birth of each person provided access to SYSTEM information. User will provide to DFA the name, address, job title, e-mail address, employee or personnel number, and date of birth of a primary and alternate person to act as liaisons for matters concerning SYSTEM information security.

B. User shall notify the DFA CIO or designee promptly of any breaches of SYSTEM security that involve SYSTEM information. User will track access to SYSTEM information and maintain reports of

access to SYSTEM information. User's reports of access to SYSTEM information shall be made available to DFA upon request.

C. User shall notify DFA when any person granted access no longer requires access to the SYSTEM information.

D. User shall track access to SYSTEM information so that an actual or suspected compromise of confidential information can be properly investigated. User shall permit DFA to make onsite inspections of locations where SYSTEM information is being accessed or used to ensure the requirements of the state laws, federal statutes and regulations, and DFA security requirements are being met. Such visits shall be arranged at a time mutually convenient to both parties to this agreement.

VI. Non-disclosure

A. All SYSTEM information obtained through association with DFA, whether disclosed intentionally or inadvertently, shall be considered confidential and must be safeguarded from unauthorized access, use, disclosure, dissemination, and/or mishandling. User's access and use to SYSTEM information shall be restricted to those authorized individuals who need the information to perform their official duties in connection with the purpose for which the information is being released as specified above. Such information must not be disclosed or disseminated to a third party except as provided by federal or state law or authorized in writing by DFA.

B. All of User's managers and staff or contracted staff who take part in the activities covered by this agreement and who have access to information from an electronic file, directory, or table containing PII or who, by the nature of their position, are likely to gain intentional or unintentional access to SYSTEM information are required to sign a Confidentiality Agreement provided by DFA.

C. Any information concerning the DFA security policies, procedures, operating systems, servers and/or security programs must not be discussed with anyone that does not have a need for that information. DFA information security policies, standards, and procedures will be followed with regard to protection and disclosure of confidential information from DFA.

D. User understands and acknowledges that unauthorized access, use, disclosure dissemination or mishandling of SYSTEM information will result in denial of access to SYSTEM information and may result in state and/or federal criminal prosecution, fines, imprisonment, civil penalties, and/or civil liability. Should DFA be ruled liable in any court or proceeding for damages, civil penalties, and/or attorney's fees as a result of the unauthorized access, use, disclosure, dissemination, and/or mishandling of SYSTEM information by User or User's employee's agents, and/or contractors, User agrees to indemnify DFA for any damages, civil penalties, and/or attorney's fee DFA is ordered to pay.

VII. Financial Considerations

User shall bear all expenses related to the provision of access to SYSTEM information. In the event DFA is billed by DIS or another entity for services related to this agreement, User shall promptly reimburse DFA upon being invoiced by DFA.

VIII. Amendment and Termination

A. This agreement may be amended at any time provided such amendments are in writing and signed by all parties to the agreement. This provision does not limit the authority and responsibilities of the information exchange managers to enter into memoranda of understanding as specified in this agreement.

B. Either party may unilaterally terminate their participation in this agreement upon written notice to the other party or parties, in which case the termination shall be effective 30 days after the date of the notice, or at a later date if specified in the written termination notice.

C. Either party may terminate their participation in this agreement immediately upon receipt of a written notice by the other party, provided such termination is for failure to comply with a provision of this agreement.

IX. Approval of Information Sharing Agreement

Arkansas Department of Finance and Administration

Signature: _____ Printed Name: _____

Title: _____ Date: _____

Name of Entity (User): YASH TECHNOLOGIES, INC

Signature: _____ Printed Name: REGHU NAIR

Title: CONTRACTS MANAGER Date: 06/03/2018

Email: reghu.n@yash.com Phone Number: 309-755-0433

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Attachment T-6_B

RFP #: SP-18-0087

The section following this page will contain the attachment identified below:

ATTACHMENT ID	ATTACHMENT NAME	ATTACHMENT PROVIDED?		REFERENCE TO PROPOSAL RESPONSE SECTION
Attachment T-6 B	Vendor Confidentiality Agreement - YASH	YES ☒	NO ☐	Technical Proposal; T-6 ATCH. T-6_B

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Department of Finance and Administration
Office of Information Services

Vendor Confidentiality Agreement

This Agreement effective as of APRIL 03, 2018, between YASH TECHNOLOGIES INC. (hereinafter referred to as "Vendor") and the Arkansas Department of Finance and Administration, an agency and instrumentality of the State of Arkansas (hereinafter referred to as "DFA") confirms the terms under which Vendor and DFA and its agents will exchange sensitive information, taxpayer information, protected health information, proprietary information, trade secrets, and materials (hereinafter referred to as "Information"). The Information includes not only written information, but also information stored or transmitted orally, visually, electronically or by any other means.

In consideration of these recitals and the mutual promises set forth in this Agreement, the exchange, receipt and sufficiency of which are acknowledged, the parties agree as follows:

Any Information disclosed by either party in accordance with this Agreement shall be maintained in secrecy and each will use reasonable diligence to prevent disclosure except to necessary personnel. Vendor and DFA shall not have any obligation of confidentiality with respect to any information that:

- is in the public domain by use and/or publication at the time of its receipt from the disclosing party; or
- was already in its possession prior to receipt from the disclosing party or is developed independently of Information received from the disclosing party; or
- is properly obtained by recipient from a third party with a valid right to disclose such Information and such third party is not under a confidentiality obligation to the disclosing party; or
- is required to be disclosed by law, provided that the party required to disclose shall promptly notify the other party of such requirement so that the other party can seek a protective order or take other appropriate action.

Any and all Information received by Vendor from DFA, upon request, shall be promptly returned or destroyed and a Certificate of Destruction provided to DFA.

All previous confidentiality agreements between the parties hereto shall remain in full force and effect and in the event of any conflict between confidentiality agreements the agreement providing for stricter confidentiality shall control. No modification or alteration of this Agreement shall be effective unless in writing and signed by Vendor and DFA. In the event that any provision of this Agreement is void or unenforceable, all other provisions shall remain valid and enforceable.

The validity and interpretation of this Agreement shall be governed by the laws of the State of Arkansas.

Arkansas Dept. of Finance & Administration

Signature _____

Name _____
Please Print

Title _____

Date _____

Company Name:

Signature _____

Name REGHU VAIR
Please Print

Title CONTRACTS MANAGER

Date 04/03/2018

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Attachment T-6_C

RFP #: SP-18-0087

The section following this page will contain the attachment identified below:

ATTACHMENT ID	ATTACHMENT NAME	ATTACHMENT PROVIDED?		REFERENCE TO PROPOSAL RESPONSE SECTION
Attachment T-6 C	System: ECQ - YASH	YES ☒	NO ☐	Technical Proposal; T-6 ATCH. T-6_C

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System: ECQ	
Object Type	**Count**
Tables	613
Work Flow	35
SAP Scripts	34
SAP Forms	7
Adobe Forms	32
Adobe Interface	22
Function Modules	264
Function Groups	193
BSP	1
Enhancements	21
Programs(Reports/Interface/Includes)	1908
Web-dynpro	12
Classes	90
Webservice	3
Enhancement Options	203
Total	**3438**

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Attachment T-6_D

RFP #: SP-18-0087

The section following this page will contain the attachment identified below:

ATTACHMENT ID	ATTACHMENT NAME	ATTACHMENT PROVIDED?		REFERENCE TO PROPOSAL RESPONSE SECTION
Attachment T-6 D	EO 98-04 Disclosure Form - YASH	YES ☒	NO ☐	Technical Proposal; T-6 ATCH. T-6_D

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CONTRACT AND GRANT DISCLOSURE AND CERTIFICATION FORM

Failure to complete all of the following information may result in a delay in obtaining a contract, lease, purchase agreement, or grant award with any Arkansas State Agency.

SUBCONTRACTOR: ☒ Yes ☐ No

SUBCONTRACTOR NAME: YASH Technologies, Inc.

TAXPAYER ID NAME: 36-4062778

IS THIS FOR: ☐ Goods? ☒ Services? ☐ Both?

YOUR LAST NAME: Reghu FIRST NAME: Nair M.I.:

ADDRESS: 605 17th Avenue

CITY: East Moline STATE: IL ZIP CODE: 61244 COUNTRY: USA

AS A CONDITION OF OBTAINING, EXTENDING, AMENDING, OR RENEWING A CONTRACT, LEASE, PURCHASE AGREEMENT, OR GRANT AWARD WITH ANY ARKANSAS STATE AGENCY, THE FOLLOWING INFORMATION MUST BE DISCLOSED:

FOR INDIVIDUALS*

Indicate below if: you, your spouse or the brother, sister, parent, or child of you or your spouse *is* a current or former: member of the General Assembly, Constitutional Officer, State Board or Commission Member, or State Employee:

Position Held	Mark (√)		Name of Position of Job Held [senator, representative, name of board/ commission, data entry, etc.]	For How Long?		What is the person(s) name and how are they related to you? [i.e., Jane Q. Public, spouse, John Q. Public, Jr., child, etc.]	
	Current	Former		From MM/YY	To MM/YY	Person's Name(s)	Relation
General Assembly							
Constitutional Officer							
State Board or Commission Member							
State Employee							

☒ None of the above applies

FOR AN ENTITY (BUSINESS)*

Indicate below if any of the following persons, current or former, hold any position of control or hold any ownership interest of 10% or greater in the entity: member of the General Assembly, Constitutional Officer, State Board or Commission Member, State Employee, or the spouse, brother, sister, parent, or child of a member of the General Assembly, Constitutional Officer, State Board or Commission Member, or State Employee. Position of control means the power to direct the purchasing policies or influence the management of the entity.

Position Held	Mark (√)		Name of Position of Job Held [senator, representative, name of board/commission, data entry, etc.]	For How Long?		What is the person(s) name and what is his/her % of ownership interest and/or what is his/her position of control?		
	Current	Former		From MM/YY	To MM/YY	Person's Name(s)	Ownership Interest (%)	Position of Control
General Assembly								
Constitutional Officer								
State Board or Commission Member								
State Employee								

☒ None of the above applies

Contract and Grant Disclosure and Certification Form

Failure to make any disclosure required by Governor's Executive Order 98-04, or any violation of any rule, regulation, or policy adopted pursuant to that Order, shall be a material breach of the terms of this contract. Any contractor, whether an individual or entity, who fails to make the required disclosure or who violates any rule, regulation, or policy shall be subject to all legal remedies available to the agency.

As an additional condition of obtaining, extending, amending, or renewing a contract with a *state agency* I agree as follows:

1. Prior to entering into any agreement with any subcontractor, prior or subsequent to the contract date, I will require the subcontractor to complete a **CONTRACT AND GRANT DISCLOSURE AND CERTIFICATION FORM**. Subcontractor shall mean any person or entity with whom I enter an agreement whereby I assign or otherwise delegate to the person or entity, for consideration, all, or any part, of the performance required of me under the terms of my contract with the state agency.

2. I will include the following language as a part of any agreement with a subcontractor:

   Failure to make any disclosure required by Governor's Executive Order 98-04, or any violation of any rule, regulation, or policy adopted pursuant to that Order, shall be a material breach of the terms of this subcontract. The party who fails to make the required disclosure or who violates any rule, regulation, or policy shall be subject to all legal remedies available to the contractor.

3. No later than ten (10) days after entering into any agreement with a subcontractor, whether prior or subsequent to the contract date, I will mail a copy of the **CONTRACT AND GRANT DISCLOSURE AND CERTIFICATION FORM** completed by the subcontractor and a statement containing the dollar amount of the subcontract to the state agency.

I certify under penalty of perjury, to the best of my knowledge and belief, all of the above information is true and correct and that I agree to the subcontractor disclosure conditions stated herein.

Signature _____ Title Contracts Manager Date: 04/05/2018

Vendor Contact Person David Werner Title Sales Director Phone No. 610-613-0901

Agency use only

Agency Number _____ Agency Name _____ Agency Contact Person _____ Contact Phone No. _____ Contract or Grant No. _____

Attachment T-6_E

RFP #: SP-18-0087

The section following this page will contain the attachment identified below:

ATTACHMENT ID	ATTACHMENT NAME	ATTACHMENT PROVIDED?		REFERENCE TO PROPOSAL RESPONSE SECTION
Attachment T-6 E	Equal Opportunity Policy - YASH	YES ☒	NO ☐	Technical Proposal; T-6 ATCH. T-6_E

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Equal Employment Opportunity Policy

It is the policy of the Yash Technologies to provide equal employment opportunity to all individuals regardless of race, color, creed, sex, sexual orientation, age, national origin, ancestry, disability, marital status, pregnancy, political affiliation, arrest or conviction record.

Yash believes in maintaining environment free of harassment and discrimination and fostering mutual respect, recognizing the dignity and worth of all people, and promoting to the fullest, equal employment opportunity through affirmative action.

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Attachment T-6_F

RFP #: SP-18-0087

The section following this page will contain the attachment identified below:

ATTACHMENT ID	ATTACHMENT NAME	ATTACHMENT PROVIDED?		REFERENCE TO PROPOSAL RESPONSE SECTION
Attachment T-6 F	Voluntary Product Accessibility Template (VPAT) - YASH	YES ☒	NO ☐	Technical Proposal; T-6 ATCH. T-6_F

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UNITED STATES DEPARTMENT OF STATE INFORMATION RESOURCE MANAGEMENT

IMPACT

PROGRAM FOR ACCESSIBLE COMPUTER/COMMUNICATION TECHNOLOGY

Voluntary Product Accessibility Template (VPAT)

Date: 04/16/18

Product Name: Not Applicable

Product Version Number: Not Applicable

Organization Name: YASH Technologies Inc.

Submitter Name: David Werner

Submitter Telephone: 610-613-0901

APPENDIX A: Suggested Language Guide

Summary Table
Voluntary Product Accessibility Template

Criteria	Level of Support & Supporting Features	Remarks and explanations
Section 1194.21 Software Applications and Operating Systems	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
Section 1194.22 Web-based Internet Information and Applications	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

Section 1194.23 Telecommunications Products	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
Section 1194.24 Video and Multi-media Products	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
Section 1194.25 Self-Contained, Closed Products	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
Section 1194.26 Desktop and Portable Computers	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
Section 1194.31 Functional Performance Criteria	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

Section 1194.41 Information, Documentation and Support	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

Section 1194.21 Software Applications and Operating Systems - Detail
Voluntary Product Accessibility Template

Criteria	**Level of Support & Supporting Features**	**Remarks and explanations**
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

Section 1194.22 Web-based intranet and Internet information and applications - Detail Voluntary Product Accessibility Template

Criteria	Level of Support & Supporting Features	Remarks and explanations
(a) A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(d) Documents shall be organized so they are readable without requiring an associated style sheet.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(e) Redundant text links shall be provided for each active region of a server-side image map.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

(f) Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(g) Row and column headers shall be identified for data tables.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(h) Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(i) Frames shall be titled with text that facilitates frame identification and navigation	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

(k) A text-only page, with equivalent information or functionality, shall be provided to make a web site comply with the provisions of this part, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(l) When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by Assistive Technology.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(m) When a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with 1194.21(a) through (l).	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(n) When electronic forms are designed to be completed on-line, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(o) A method shall be provided that permits users to skip repetitive navigation links.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

Section 1194.23 Telecommunications Products - Detail Voluntary Product Accessibility Template

Criteria	**Level of Support & Supporting Features**	**Remarks and explanations**
(a) Telecommunications products or systems which provide a function allowing voice communication and which do not themselves provide a TTY functionality shall provide a standard non-acoustic connection point for TTYs. Microphones shall be capable of being turned on and off to allow the user to intermix speech with TTY use.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(b) Telecommunications products which include voice communication functionality shall support all commonly used cross-manufacturer non-proprietary standard TTY signal protocols.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(c) Voice mail, auto-attendant, and interactive voice response telecommunications systems shall be usable by TTY users with their TTYs.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(d) Voice mail, messaging, auto-attendant, and interactive voice response telecommunications systems that require a response from a user within a time interval, shall give an alert when the time interval is about to run out, and shall provide sufficient time for the user to indicate more time is required.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

(e) Where provided, caller identification and similar telecommunications functions shall also be available for users of TTYs, and for users who cannot see displays.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(f) For transmitted voice signals, telecommunications products shall provide a gain adjustable up to a minimum of 20 dB. For incremental volume control, at least one intermediate step of 12 dB of gain shall be provided.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(g) If the telecommunications product allows a user to adjust the receive volume, a function shall be provided to automatically reset the volume to the default level after every use.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(h) Where a telecommunications product delivers output by an audio transducer which is normally held up to the ear, a means for effective magnetic wireless coupling to hearing technologies shall be provided.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(i) Interference to hearing technologies (including hearing aids, cochlear implants, and assistive listening devices) shall be reduced to the lowest possible level that allows a user of hearing technologies to utilize the telecommunications product.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

(j) Products that transmit or conduct information or communication, shall pass through cross-manufacturer, non-proprietary, industry-standard codes, translation protocols, formats or other information necessary to provide the information or communication in a usable format. Technologies which use encoding, signal compression, format transformation, or similar techniques shall not remove information needed for access or shall restore it upon delivery.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(k)(1) Products which have mechanically operated controls or keys shall comply with the following: Controls and Keys shall be tactilely discernible without activating the controls or keys.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(k)(2) Products which have mechanically operated controls or keys shall comply with the following: Controls and Keys shall be operable with one hand and shall not require tight grasping, pinching, twisting of the wrist. The force required to activate controls and keys shall be 5 lbs. (22.2N) maximum.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(k)(3) Products which have mechanically operated controls or keys shall comply with the following: If key repeat is supported, the delay before repeat shall be adjustable to at least 2 seconds. Key repeat rate shall be adjustable to 2 seconds per character.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(k)(4) Products which have mechanically operated controls or keys shall comply with the following: The status of all locking or toggle controls or keys shall be visually discernible, and discernible either through touch or sound.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

Section 1194.24 Video and Multi-media Products – Detail Voluntary Product Accessibility Template

Criteria	Level of Support & Supporting Features	Remarks and explanations
a) All analog television displays 13 inches and larger, and computer equipment that includes analog television receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals. As soon as practicable, but not later than July 1, 2002, widescreen digital television (DTV) displays measuring at least 7.8 inches vertically, DTV sets with conventional displays measuring at least 13 inches vertically, and stand-alone DTV tuners, whether or not they are marketed with display screens, and computer equipment that includes DTV receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(b) Television tuners, including tuner cards for use in computers, shall be equipped with secondary audio program playback circuitry.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(c) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain speech or other audio information necessary for the comprehension of the content, shall be open or closed captioned.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

(d) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain visual information necessary for the comprehension of the content, shall be audio described.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(e) Display or presentation of alternate text presentation or audio descriptions shall be user-selectable unless permanent.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for

Section 1194.25 Self-Contained, Closed Products – Detail Voluntary Product Accessibility Template

Criteria	Level of Support & Supporting Features	Remarks and explanations
(a) Self contained products shall be usable by people with disabilities without requiring an end-user to attach Assistive Technology to the product. Personal headsets for private listening are not Assistive Technology.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(b) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(c) Where a product utilizes touchscreens or contact-sensitive controls, an input method shall be provided that complies with 1194.23 (k) (1) through (4).	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(d) When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, shall also be provided.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(e) When products provide auditory output, the audio signal shall be provided at a standard signal level through an industry standard connector that will allow for private listening. The product must provide the ability to interrupt, pause, and restart the audio at anytime.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

(f) When products deliver voice output in a public area, incremental volume control shall be provided with output amplification up to a level of at least 65 dB. Where the ambient noise level of the environment is above 45 dB, a volume gain of at least 20 dB above the ambient level shall be user selectable. A function shall be provided to automatically reset the volume to the default level after every use.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(g) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(h) When a product permits a user to adjust color and contrast settings, a range of color selections capable of producing a variety of contrast levels shall be provided.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(i) Products shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

(j) (1) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: The position of any operable control shall be determined with respect to a vertical plane, which is 48 inches in length, centered on the operable control, and at the maximum protrusion of the product within the 48 inch length on products which are freestanding, non-portable, and intended to be used in one location and which have operable controls.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(j)(2) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Where any operable control is 10 inches or less behind the reference plane, the height shall be 54 inches maximum and 15 inches minimum above the floor.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(j)(3) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Where any operable control is more than 10 inches and not more than 24 inches behind the reference plane, the height shall be 46 inches maximum and 15 inches minimum above the floor.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(j)(4) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Operable controls shall not be more than 24 inches behind the reference plane.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

Section 1194.26 Desktop and Portable Computers – Detail Voluntary Product Accessibility Template

Criteria	**Level of Support & Supporting Features**	**Remarks and explanations**
(a) All mechanically operated controls and keys shall comply with 1194.23 (k) (1) through (4).	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(b) If a product utilizes touchscreens or touch-operated controls, an input method shall be provided that complies with 1194.23 (k) (1) through (4).	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(c) When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, shall also be provided.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(d) Where provided, at least one of each type of expansion slots, ports and connectors shall comply with publicly available industry standards	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

Section 1194.31 Functional Performance Criteria – Detail Voluntary Product Accessibility Template

Criteria	**Level of Support & Supporting Features**	**Remarks and explanations**
(a) At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for Assistive Technology used by people who are blind or visually impaired shall be provided.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for Assistive Technology used by people who are visually impaired shall be provided.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(c) At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for Assistive Technology used by people who are deaf or hard of hearing shall be provided	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(d) Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

(e) At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for Assistive Technology used by people with disabilities shall be provided.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(f) At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

Section 1194.41 Information, Documentation and Support – Detail Voluntary Product Accessibility Template

Criteria	Level of Support & Supporting Features	Remarks and explanations
(a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(b) End-users shall have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.
(c) Support services for products shall accommodate the communication needs of end-users with disabilities.	N/A	YASH is proposing services for technical back end hardware operating systems and database migrations, with no impact to existing state user interfaces for SAP. No new product is being provided by YASH to the State.

APPENDIX A (of the DoS VPAT/GPAT Checklist)

Suggested Language for Filling out the VPAT/GPAT

In order to simplify the task of conducting market research assessments for procurement officials or customers, ITIC (Information Technology Industry Council) has developed suggested language for use when filling out a VPAT/GPAT. You may choose to employ all or some of the language below. Once you determine what language you intend to use, we recommend that use is consistent throughout all of your VPAT/GPATs.

Supporting Features (Column 2 on VPAT/GPAT)

Supports
Use this language when you determine the product fully meets the letter and intent of the Criteria.

Supports with Exceptions
Use this language when you determine the product does not fully meet the letter and intent of the Criteria, but provides some level of access relative to the Criteria.

Supports through Equivalent Facilitation
Use this language when you have identified an alternate way to meet the intent of the Criteria or when the product does not fully meet the intent of the Criteria.

Supports when combined with Compatible AT
Use this language when you determine the product fully meets the letter and intent of the Criteria when used in combination with Compatible AT. For example, many software programs can provide speech output when combined with a compatible screen reader (commonly used assistive technology for people who are blind).

Does not Support
Use this language when you determine the product does not meet the letter or intent of the Criteria.

Not Applicable
Use this language when you determine that the Criteria do not apply to the specific product.

Not Applicable - Fundamental Alteration Exception Applies
Use this language when you determine a Fundamental Alteration of the product would be required to meet the Criteria (see the access board standards for the definition of "fundamental alteration").

IMPACT Outreach Center
IRM Program for Accessible Computer/Communication Technology (IMPACT)
2025 E Street, N.W. (SA-9)
Washington, DC 20006
Email: SECTION508@state.gov
Internet: http://www.state.gov/m/irm/impact/index.htm
Intranet: http://impact.state.gov

Attachment T-6_G

RFP #: SP-18-0087

The section following this page will contain the attachment identified below:

ATTACHMENT ID	ATTACHMENT NAME	ATTACHMENT PROVIDED?		REFERENCE TO PROPOSAL RESPONSE SECTION
Attachment T-6 G	Minority Vendor Certificate – NMSDC - YASH	YES ☒	NO ☐	Technical Proposal; T-6 ATCH. T-6_G

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THIS CERTIFIES THAT

Yash Technologies, Inc.

NMSDC
National Minority Supplier Development Council

* Nationally certified by the: **MID-STATES MINORITY SUPPLIER DEVELOPMENT COUNCIL**

*NAICS Code(s): 541511

* Description of their product/services as defined by the North American Industry Classification System (NAICS)

12/11/2017		IN02365
Issued Date		**Certificate Number**
	Louis Green	
12/11/2018		
Expiration Date		**Carolyn E. Mosby, President/CEO**

By using your password (NMSDC issued only), authorized users may log into NMSDC Central to view the entire profile: http://nmsdc.org

Certify, Develop, Connect, Advocate.

* MBEs certified by an Affiliate of the National Minority Supplier Development Council, Inc.®