AGENDA

Company Overview
Project Overview
Solution Manager Scope
Solution Documentation and Process Management in SAP
Solution Manager
Test Suite usage in SAP Solution Manager
Value of SAP Solution Manager for digital transformation
Summary
• Australia based multinational corporation
  – world’s largest provider of commercial explosives and blasting systems
• Industry: Metals, mining, oil and gas, construction, tunneling
• Products: Explosives, Sodium cyanide, Ground support
• Number of employees: 11,500 (2016)
• Revenue: AUD 5.1 Billion (2016)
Incorporating
- SAP S/4HANA
- SAP Ariba
- SAP SuccessFactors
- SAP Fieldglass
- SAP Concur
- SAP Cloud for Customer (C4C)
- OneSource (non-SAP)
- Blackline (non-SAP)

• Entirely hosted on Microsoft Azure
• Commenced beginning of 2017, final go-live is October 2019
SAP SOLUTION MANAGER SCOPE FOR PROJECT

• Solution Documentation including Process Management
  – All process modelling done (except scenario variants)
  – High-level, end-to-end scenarios are modelled
  – Linked with Test scripts and Test steps
• Test Suite
  – Test suite is used to manage testing, fully integrated with Solution Documentation
• Focused build’s test capabilities
• 2 tier landscape of SAP Solution Manager 7.2 SP07 + Focused Build 200 SP02
WHY SAP SOLUTION MANAGER?

- SAP Solution Manager has the capabilities and maturity to handle all aspects of Application Lifecycle Management
- Highly integrated: All relevant module of Solman is seamlessly integrated
- Comes with Enterprise Support Contract: No additional license cost
- Provides Single source of truth of entire Solution Documentation (incl. process documentation, landscape documentation, etc.)
- Provides sophisticated Process Management incl. modeling functionalities
- Provides highly mature Test Suite functionalities to manage end to end testing for hybrid landscape
- Quite easy to learn and use Process Management and Test Suite of SAP Solman
# SCOPE OF RELEASES (R1,R2,R3)

<table>
<thead>
<tr>
<th>Release R1</th>
<th>Release R2</th>
<th>Release R3a</th>
<th>Release R3b</th>
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<tbody>
<tr>
<td>SAP Ariba</td>
<td>SAP Success Factors</td>
<td>SAP Fieldglass</td>
<td>SAP S/4HANA</td>
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<tr>
<td>SAP Concur</td>
<td>SAP Cloud for Customer</td>
<td>SAP Ariba (Additional functionalities)</td>
<td>OneSource (non-SAP)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Blackline (non-SAP)</td>
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SOLUTION DOCUMENTATION AND PROCESS MANAGEMENT USAGE
With SAP Solution Manager Process Management business and IT plan, manage, and operate processes in one common process landscape.

- **Process Management**
  - Web-based documentation experience
  - Multi-level process hierarchies
  - Integrated graphical process editor
  - Processes assembled from re-use libraries
  - Processes are tied, validated, and optimized continuously based on real usage

- **Integrated Process Experience**
  - Requirements Management integration
  - Change Management integration
  - IT Project and Portfolio Management integration
  - Test Suite integration
  - Business Process Monitoring integration
Reuse Model

SAP Solution Manager process management builds processes from reuse elements managed in libraries.

- Process Step Library
- Executable Library
- Development Library
- Configuration Library
- Interface Library
- Alerting/Analytics Library

Diagram only activity

Process Step Diagram Occurrence

Process Step Reference

Process Step Original

Executable Reference

Executable Original

BPMN (Diagram)

Processes

Process Definition (Column Browser)

Diagram only activity

Executable

Reference

Executable

Original

Process Step Library

Process Step Library

Executable Library

Process Definition (Column Browser)
Process modeling
Integrated graphical BPMN process editor

SAP Solution Manager 7.2 comes with an integrated graphical BPMN process editor.

- Graphical process modelling
  - Process diagrams provide control flow centric views on processes
  - Process diagrams follow BPMN specification
  - Modelling elements are not just integrated with SAP Solution Manager they are managed by SAP Solution Manager
    - Shared process definition
    - Shared documentation
    - Shared lifecycle
    - ...

Process diagrams are managed as part of the solution documentation.
No of Scenarios: 8

- 8 x End-2-End processes, split into 200+ Variants (only for testing purpose)

No of Processes: 600

No of Process Steps: 7100
WHY IS BPM IMPORTANT?

The holistic management of Business Processes……

……allows Functional experts and Solution Architects to describe business and IT perspectives of process, applications, and system landscapes in a central location, linking the Business Process with the technical layers that support it.

| Business Processes   | • Standardisation  
|                      | • Transparency    
|                      | • Uniformity      
| IT Solution          | • Systems & Applications 
|                      | • Data Integrity  
|                      | • Consistency     
| Business Gains       | • Profit           
|                      | • Productivity    
|                      | • Performance     |
WHY IS IT IMPORTANT TO HAVE GOOD BPM?

Having good Business Process Management can help you to follow your Charter. For example:

• **Excellence**: Test our processes rigorously
• **Integrity, Excellence**: Benchmark performance effectively
• **Safety, Respect**: Mitigate risk effectively
• **Together, Integrity**: Promote the right behaviours in the workplace
• **Excellence**: Create significant efficiency and productivity gains

Business Process Management is also central to many SAP Solution Manager scenarios:

• Well integrated with Test Suite
• Change Control Management
• Business Process Monitoring
- Defines the documentation structure for the entire process design
- Interacts with the Process Models
- The Process Hierarchy and Process Models are two sides of the same coin
- Modular design vs E2E design
- Tips
  - Can import best practices as a starting point
  - It is imperative to avoid bottom-heavy process definition
  - Define your process hierarchy and process steps outside of SolMan Dev first
Universal diagram:
- We use the Universal Diagram because it offers free-form modelling functionality unbound by BPMN 2.0 constrictions.
- Uses breadcrumb list to be able to link objects back to the process architecture
- 8 high-level Universal Diagrams used

Collaboration diagram
- We use the Collaboration Diagram as it offers greater functionality than the Process Diagram
- We maintain a rule of one Diagram per Process, so we have approx. 600 Collaboration Diagrams
- We also use Collaboration Diagrams for system interface modelling
  › Swim lanes represent LCGs
  › We have approx. 210 system interface diagrams
PROCESS MANAGEMENT – EXAMPLE Ariba
PROCESS MANAGEMENT – EXAMPLE FIELD GLASS
PROCESS MANAGEMENT – EXAMPLE NON-SAP
• Forward planning is key:
  – Process architecture
  – Process step definition
  – Landscape design
• Recommend layered modeling approach:
  – Define process architecture
  – Define process steps
  – Model the flow
  – Add layers of information
    › Security design
    › Executables
    › Metrics and Reports
• Based on BPMN 2.0 framework
  – May be too comprehensive / complicated for your needs
  – Recommend evaluating objects and their subtypes before stripping unnecessary objects / sub-types from your standard
  – System or Role-based diagrams
    › We use role-based for our process modelling, and system-based for our interface diagrams
• Provides single source of truth but requires early commitment and effective planning to work effectively
Rules

- Connections **should** flow into the left-hand side of Process Steps and Events, and exit from the right-hand side.
- All actions, decisions or choices **must** be taken by a Process Step, **not** by an Event.
- Non-SAP system Process Steps **must** be included.
- Model all outcomes for all Process Steps.

Object layout

Start your flow with a Start Event and then use the left-click **Callout** menu to quickly connect subsequent Objects.
- Use the orange tramlines to ensure your layout is organized.
- Remember to leave enough space between horizontal flows for:
  - Process interface icons and names
  - Data Objects
  - Data Store
Object layout (Contd.)

- Try and model the **Happy path** in a straight line, with Exceptions paths below, and incoming Start Events above:

Selecting Multiple Objects

- Hold SHIFT and individually left-click a series of objects to select them all at once
- Hold SHIFT and use the left mouse button to drag a box around multiple objects
  - You must start this box outside of the pool. Clicking inside the pool will select the Swim Lane.
Right-click Callout Menu

- Use this to flesh out your design and add a second level of detail
  - Subtypes for:
    - Process Steps
    - Gateways
    - Events
  - Maintain a Reference
    - Add Process Interfaces to Start or End Events
    - Add System Interfaces to Intermediate Events
1. Use Google Chrome
   - IE will fail to display objects properly, and provides limited options in the Command Ribbon
   - However, Chrome is unable to handle large models. My advice is to have a maximum of 30 process steps per process.

2. BPMN 2.0 training
   - Provide at least a basic level of training to your functional consultants before commencing design

3. Make the connection between quality BPM and your Charter / Company values

4. Define and refine your process architecture outside of Solution Manager first (planning is key)

5. Avoid heavy time investment in the reuse model, unless your processes and process flows are extremely well defined and unlikely to change

6. Develop a Key User framework to effectively monitor and manage the modelling requirements and execution across multiple teams

7. Write a clear design standard that leaves as little room for interpretation as possible.
### VALUE OF PROCESS MANAGEMENT IN SOLMAN

<table>
<thead>
<tr>
<th>Transparency</th>
<th>Efficiency</th>
<th>Enables traceability</th>
<th>Secure</th>
<th>Faster T2O</th>
<th>Business process monitoring</th>
<th>No license cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single platform to create and manage process models and documents</td>
<td>Centrally stored, no need to search at multiple locations</td>
<td>Of business processes and change requests</td>
<td>Every thing is access controlled, no local storage on laptops</td>
<td>Expect faster Transition to Operations, as all the needed process models and documents are well cataloged.</td>
<td>Can later be used monitor business processes</td>
<td>Solman is part of ES maintenance contract</td>
</tr>
</tbody>
</table>

In nutshell, enables efficient process modeling and documentation, leading to faster project delivery, at no license cost.
TEST SUITE USAGE
TEST SUITE USAGE

• Using Solution Manager as the Testing tool for managing the Functional, Integration & UAT testing.
• Used the ‘Manual Testing’ approach by building the test cases manually in an excel format & then uploading into Solution Documentation with reference to a Process Step.
• Test Plan created using the scope of the Business Processes & the assigned test cases to execute the testing with multiple test packages.
• Around 1500 manual test case documents (Excel) have been uploaded into Solution Documentation to use in Testing during R2 release.
• As the volume of testing increases during R3, we expect this number to multiply by 3-4 times, at around 6000.
We have implemented Focused Build to get benefit from some of the accelerators and for more transparency of the test cases being tested. An example of this is the Test Case with Test Steps where you can either build a test case directly in Solution Manager with number test steps or upload the test cases from an excel file at a single shot for multiple test cases to prepare the initial content.

By using Focused Build, we are able to test at step level, thus giving more transparency in Test plan execution.

Integrated with Incident Management tool in Solution Manager to report and track the defects resolution directly from testing application.
### TEST SUITE USAGE IN SAP SOLUTION MANAGER VOLUME

<table>
<thead>
<tr>
<th>Project Release</th>
<th>Type of Testing</th>
<th>No.of Test Plans</th>
<th>Testing Method</th>
<th>No.of Test Packages</th>
<th>No.of Test Cases</th>
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It will go up to 6000 test cases in R3b.
## TEST SUITE – TEST PLANS

### Multiple Test Plan Status Details

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<th>Display As</th>
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<td>4SROA_INTEGRATION_TEST</td>
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### Tester Status

<table>
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<tr>
<th>Type</th>
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<th>Tester</th>
<th>Tester Name</th>
<th>Open Defects</th>
<th>Defects</th>
<th>Tl</th>
<th>Overall Pat</th>
<th>Overall Stat</th>
<th>Execution</th>
<th>Execution Status Description</th>
<th>Date</th>
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<tr>
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</table>
TEST SUITE - DASHBOARD
VALUE OF TEST SUITE IN SOLMAN

- **Transparency**
  - Single platform to manage end to end testing e.g. testing progress, defects, etc.

- **Efficiency**
  - Quite easy to create Test Plans and assign testers
  - Quite intuitive to create sequence of test cases

- **Enables traceability**
  - Of business processes and change requests

- **Secure**
  - Authorization controlled access to Test plans, Test cases, defects, etc.
  - Audit compliant: All changes are logged

- **Faster T2O**
  - Regression Test Plan can easily be created using existing test cases
  - Also Business Process Change Analyzer functionality helps in efficient testing post go live

- **Find defects early**
  - Well managed testing ensure that defects are found early

- **No license cost**
  - Solman is part of ES maintenance contract

All under one roof: Comprehensive and mature Test Suite functionalities of SAP Solution Manager supports manual and automated testing of on premise, cloud and hybrid solutions
MY EXPERIENCE

• New product, therefore has some challenges
  – SAP open to feedback in order to improve the product
  – Good response to bugs
  – Important to communicate all issues via the SAP Incident Mgmt. site

• Detailed planning is key to avoiding delays and re-work
  – Determine your reporting requirements early, and integrate these into your design
Optimizing the digital transformation project with SAP Solution Manager and Focused Build

This Australian multinational explosive manufacturer implemented many SAP cloud solutions. They leveraged SAP Solution Manager & Focused build as delivery platform to model their business processes and optimize their testing for their hybrid landscape.

Before: Challenges and Opportunities for SAP cloud solutions
- Reduced hardware costs
- Greater levels of transparency and integration
- Maintain process integrity (no offline processes sitting on hard drives, etc)
- Helps mitigate material enterprise risks
- Sustains business improvement initiatives and opportunities
- Facilitates faster response to changing market conditions

Why SAP Solution Manager and Focused Build
- Improved Process Management with mature modelling capabilities
- Test suite is quite comprehensive
- Supports on premise, cloud and hybrid solutions
- No additional license cost
- Transition to operations becomes easier
- One integrated tool which ensures complete traceability
- Support from SAP Digital Business Services during setup and training

After: Value-Driven Results
- Provides a clear dashboard for testing progress
- Business process driven testing leading to comprehensive testing
- Much lesser defect in production
- Single Source of Truth for entire Solution Landscape
- Highly scalable tool supporting on premise, cloud and hybrid landscape for project delivery and operations
- One integrated and comprehensive tool with no additional license cost

“SAP Solution Manager enables efficient process modeling and documentation, leading to faster project delivery, at no license cost. We have modeled 600 processes.”
Alexander Helme – BPM Consultant

“SAP Solution Manager efficiently supports high volume testing with 6000 testcases”
Alexander Helme – BPM Consultant

Australia based multi-national corporation

Industry
Metals, mining, oil and gas, construction, tunneling

Stats
~ Number of employees: 11,500 (2016)
~ Servicing customers around 100 countries

Revenue
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SAP Ariba
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Alexander Helme – BPM Consultant
SUMMARY

✓ SAP Solution Manager is sufficient and no third party tool is needed
✓ We used SAP Solution Manager Process Management and Test suite extensively to document 600 processes and do high volume testing up to 2300 testcases
✓ Process Management modeling environment is quite rich and use BPMN 2.0 notations
✓ Test Suite support creation of 100s of test packages efficiently with enforced test case sequence
✓ Test Steps functionality in Focused Build adds to transparency by efficiently pointing to the particular step where failure has happened.
✓ Mass tester management functionality in Focused build helps in quickly replacing one or many testers
✓ Process Management and Test Suite functionality is used to document, model and test many SAP Solutions e.g. S/4HANA, SAP Ariba, SAP Success Factor, SAP Concur, etc.
✓ Hypercare and transition to operations is expected to be smooth.
THANK YOU – ALEX HELME