



Creating a Multi-State Modernized Cloud Based UI Consortium Model



Title: ReEmployUSA – Launching the ReEmployMe Unemployment Insurance Application in a Cloud based Consortium Model

State: Maine, Mississippi, Rhode Island

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Executive Summary

The 2017 successful launch of the ReEmployMe Mississippi / Maine Unemployment Insurance Benefits system has proven that states can work together to both introduce innovative technology processes (like cloud hosting) and share a common code base to fulfill federal requirements. This was the first application of multi-tenancy and cloud hosting in the UI domain. Rhode Island and Connecticut will be the next states to launch. The project truly proves that states can build a solution once, use with many others.

In 2012 The State of Maine's Department of Labor Bureau of Unemployment Compensation (BUC) legacy UI Benefits and Tax applications were comprised of a variety of standalone applications some of which existed from 1990's or earlier and some of which were recent developments. In 2011 - 2012, Maine DOL implemented a project that updated the infrastructure, application and operating systems for the core system, UIProd with the intention of keeping the UI system alive while a better and comprehensive system could be found. From 2012 to 2017 there were 19 MDOL projects developed that modified or interfaced with the BUC applications which was stressing the UIProd core system. There had been several attempts to redesign the UI applications prior to 2012 but there was no clear path to replacement of the core UI functionality. Replacing the UI application was generally found to be prohibitive in cost and difficult to manage utilizing existing state resources.

In 2012, Mississippi launched an opportunity for states to join them in the creation of a multi-state consortium utilizing a single UI core application hosted in the cloud. This system would be based on the core of the Mississippi's very successful web-based Access MS UI application developed between 2005 and 2008 and launched the final phase of the benefits application in a state hosted environment in 2009. MS launched their final phase of the upgraded tax application in a locally hosted environment in 2013.

In 2013, Mississippi announced a 3-state consortium consisting of Mississippi, Rhode Island, and Maine (MRM) with the goal of developing a process to create a multi-tenancy UI application in the cloud. This consortium effort was supported by ITSC, a division of NASWA who had been selected by USDOL to support UI Consortium efforts.

On December 6, 2017 ReEmployMe went live to the public as the State of Maine UI application. It became the first UI system to be shared by two states and hosted in the cloud.

Concept

Background

The MRM Consortium, led by Mississippi, focused its efforts on devising ways to reduce long-term maintenance and support costs by sharing those costs, and at the same time paving the way for additional states to join the UI consortium to expand the sharing of system and further reduce the on-going maintenance cost. The Mississippi UI System was recognized as the only successful comprehensive reengineered UI Systems in the nation, and this project was used to enhance the Mississippi Department of Employment Security (MDES) unemployment system and overhaul other state UI systems. The MRM Consortium received a \$90 million grant from the USDOL in accordance with a technology consortium proposal submitted on July 6, 2012. Additional funding of \$4.5 million was received in 2014 to be used for expanded staffing. Funding for this project is through the approval of grants from USDOL, and includes \$11.5 million for each of the 3 states for specific development, and \$60 million for core development. The estimated duration of the project was 6 years and 6 months for all Consortium members to be fully converted.

The Challenge of Governance

In January of 2013 the first meeting of the MRM Consortium Executive Committee (CEC) met in MS to outline the tasks and process ahead for the project. This committee was comprised of Executives from each state, Project Managers and Subject Matter Experts from each state, ITSC and Tata Consulting Services leadership team members.

One of the first topics for the CEC to cover was the matter of Governance. While it was clear that Mississippi was the lead state and providing oversight of the vendor TCS; it was unclear how best to manage the interrelationships between states. Although both Rhode Island and Maine were starting the project at the same time, over the process of time differences of approach and differing state needs would surface. It is to the credit of the leadership of the CEC that these differences were managed to the satisfaction of the members. Discussions ranged from managing finances, hosting platforms, application accessibility, security criteria, to acceptance of change requests at state levels. The CEC met challenges such as selection of cloud hosting vendor, contract management, and meeting IRS and SSA standards for secure handling of PII and FTI.

Name	Role	Comments
ITSC/ NASWA	UI Consortiums consultants and IV&V	Provided personnel to assist state teams in managing analysis, defining roles, and test management- Hosted SharePoint site for tracking progress and wiki for sharing best practices
TCS	Tata Consultancy Services – application vendor	Provided state on-site and MS located development teams and personnel.
Mississippi	Lead state	Provided overall Project Director and Project Manager – managed state development processes – primary management of vendor – Managed USDOL grant finances– Provided leadership for CEC
Maine	Member State	Joined 2012
Rhode Island	Member State	Joined 2012

Connecticut	Member State	Joined 2017
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In July of 2017 the MRM Consortium was rebranded to ReEmployUSA and each state was given its own logo such as ReEmployME. Also in the summer of 2017, the state of Connecticut joined the Consortium as a member state.

How Maine prepared for the transition to a new shared UI Benefits application

- Conceptually the members of the MRM Consortium were guided by a rule of thumb that 80% of UI application business functions are the same in every state – the remaining 20% of functions are unique business rules or functions driven by state statute or other unique legal requirements or services.
- Any changes to the original design of the functioning MDES ACCESS MS had to be justified by citation of statute or demonstration of other unique legal requirements or services. Otherwise member states would comply with the current system design.

Each state formed its own Project team with a Project Manager, Lead SME, Technical Lead role, and test group. Maine also contracted with an organizational change and consulting group to assist with position analysis and planning for future changes. Maine identified business practices and employee roles that would be impacted by the new application.

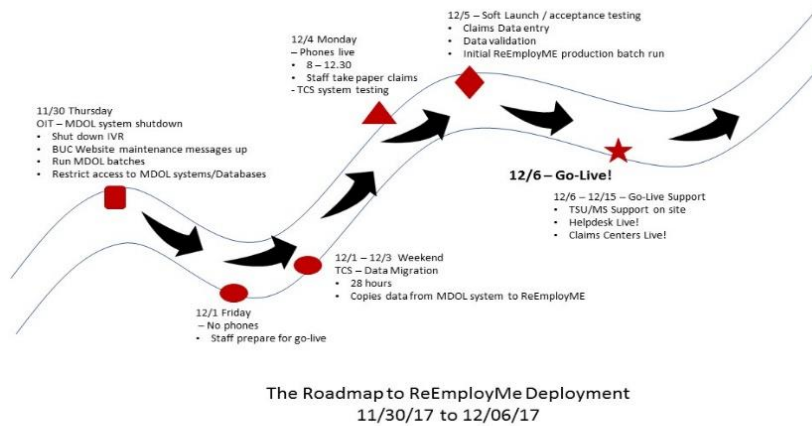
Over time the Maine state project team grew as more specific tasks were developed in various process areas including:

- Testing and defect team which provided UAT services and regression testing to test deployed application functions. This group was also responsible for data clean up and data transition during cutover.
- Training Service Unit – 7 employees who developed training materials, curriculum and detailed training plans for all employees. They also provided an application help desk.
- Business Intelligence project team – converting legacy reporting to a common BI interface that utilized the Consortium application database.
- Print and Mail Project – Maine identified an opportunity to leverage savings by moving legacy print and mail processes to a 3rd party vendor who provided state of the art print and mail services at a lower cost than previously utilized internal state services. MS adopted the same vendor for their print and mail services.
- Communications team led by the OD consulting team – initially focused on internal communications to keep Maine DOL employees informed. As the project moved closer to deployment, the focus shifted to both internal and external communications. External communications consisted of mailing updates to constituents and upgrading the Maine DOL UI website with the latest information. This citizen outreach was so successful at communicating the cutover schedule that at the time of deployment, the old system was shut down there were no users active in the legacy systems.

Technical Preparation for transition

The first two years were spent in detailing the current legacy systems architecture, functions and governing business rules by documenting in detail:

- Traditional gap analysis – identifying unique business rules or functions
- Outlining the As Is – mapping and defining current infrastructure and business rules



- Comprehensive work flow diagrams detailing inputs and outputs of both legacy systems and new application systems. Detailed SOP revision and launch of a SharePoint site to maintain SOP library
- Defining requirements unique to each state and registering them as change requests in the Consortium IBM Jazz system used to track changes and defect management

Deployment dates were moved forward as it became apparent that the level of customization process required additional time for testing and defect management prior to launching the application for public use. Some features and functions were deferred to post deployment timelines.

During this time testing and retesting was the norm for TCS and Maine project teams including:

- 10 Data Migration practice runs to ensure errors were less than .001% at final deployment
- Multiple Smoke Testing and regression testing rounds to ensure functionality of releases
- End to End testing using test cases built off common scenarios
- Multiple runs for all outputs of correspondence and reports

Benefits Deployment in 2017 – Go Live 12-06-2017

- Prior to deployment TCS relocated several resources to Maine to remain onsite during the cutover process. MDES sent Mississippi employees to assist the Maine Training Service Unit for go live. These resources were distributed to regional offices across the state.
- The State of Maine team built a detailed plan for deployment beginning with shut down of legacy system applications on November 30th at 5 pm.
- TCS and the Maine team began a process of transferring data to the new application as soon as the legacy back up finished.
- Operations staff took new claims on paper for use in testing the system when it came online.
- On 12-05-17 Maine DOL BUC leaders tested scenarios in the new system (acceptance testing) and declared it ready for go live to the public.

On Dec 7, 2017, John Feeney, Director of MDOL BUC sent the following email :

Yesterday at 8am Maine became the second state to deploy its UI benefits system (ReEmployME) using the modernized, multi-tenant, cloud-based solution developed by the ReEmployUSA consortium. A lot of hard work, dedication and perseverance made this multi-year effort possible. This was truly a team effort involving Maine, Mississippi and Rhode Island UI experts, Federal partners, ITSC professionals and multiple vendors.

Overall, it was a very positive launch. Maine saw 3166 claimants sign up, completed 383 initial claims, certified 3519 weekly claims, and mailed out 1239 pieces of correspondence. We encountered a minor issue with our interface to US Bank but once resolved we sent out 1327 payments totaling \$415,345 last night. The system is operating as expected and producing expected results.

We greatly appreciate the support from everyone who made this momentous occasion possible.

Dale Smith, Deputy Executive Director of MDES commented:

Tremendous accomplishment for Maine and the ReEmployUSA Consortium! The first UI system to have two states operating in a shared environment. On December 6, the Gold Standard for multi-tenant UI Systems was established. The concept has been proven.

Great work John and Maine team on achieving production...and congratulations to TCS for your outstanding work in helping ReEmployUSA achieve the multi/tenancy, cloud hosted goal.

Jim Smith, CIO for the State of Maine wrote:

“This is a very important milestone and a critical project which has been made possible as the result of the strong partnership among multiple states. Working together, we are proving that it is possible to create software that can efficiently deliver services across multiple states. I believe this will be the pathway for the future, as states search for ways to build cost-effective solutions. Congratulations to Mississippi for its vision and leadership, and to Rhode Island, Connecticut, and Maine for their partnership”.

Lessons learned

The Maine project team held multiple lessons learned sessions over the month following deployment – the goal was to identify opportunities to improve development and roll out processes for the upcoming Tax component of ReEmployMe.

John Feeney presented a summary of those key learnings at the next CEC meeting. This prompted the CEC to begin collecting lessons learned as a method of creating a repeatable and more efficient development process.

Significance:

This UI Consortium is the first group that produced a viable output with the cloud based multi-tenancy launch of the UI Benefits application. Mississippi moved their applications fully onto the cloud on August 30, 2017. Maine followed with their Benefits application on December 6th, 2017. The Maine Tax application is scheduled for a November 2018 release.

The Consortium team continues to collect lessons learned and sharpen their processes to create a repeatable efficient set of processes for states that follow Maine in deployment of ReEmployUSA components.

The CEC group continues to evolve as they move from an emphasis on design, development and delivery of an application to management of a multi-tenant cloud hosted product. One example of this process was a recent upgrade to the infrastructure released in April of 2018 resulting in improvements in operating efficiency and security. ITSC continues to support this process and share learnings with other states.

The state of Maine has a secure and efficiently operating UI Benefits system in place with enhancement releases on a regular basis. Maine is currently in development and testing for the tax components with a scheduled roll out for November 2018.

Impact:

- The Consortium established a viable cloud based UI application model. Moving the existing MDES ACCESS to the cloud in 2017 proved the hosting functionality. Moving the ReEmployMe application to the same hosting model proved the UI Consortium concept that multiple states could use the same core application while maintaining critical state specific functions.
- Citizens of the state of Maine are now serviced by a more secure and reliable UI application
- ReEmployMe has replaced a significant amount of legacy systems manual practices with automated functions. This allowed MDOL BUC to redesign and assign staff functions for cost savings and better allocation of meaningful work
- Maine OIT's cloud first strategy is supported through this transition to a cloud based consortium model – this has greatly reduced internal state based IT support costs incurred by the older legacy systems. The new ReEmployMe support model limits state IT staff accountability for performance through SLA and SOPs with the managed services of the hosting and application vendors.
- The application is sustainable and cost-effective through the Consortium model and capable of responding more efficiently to changing UI statutes at the federal level
- Lessons learned show:
 - Consortium members can benefit by sharing their experiences
 - Each state member has significant internal reorganization and planning work to succeed in deploying a shared application model
 - Member states can support each other through sharing of resources to ensure successful deployment
- In the words of Maine BUC Director John Feeney, “This was truly a team effort involving Maine, Mississippi and Rhode Island UI experts, Federal partners, ITSC professionals and multiple vendors. “

Since the successful deployment of ReEmployMe, other states have requested membership in the ReEmployUSA Consortium. There are ongoing discussions within the CEC and USDOL about this topic.